ESTABLISHED 1878.

## LAKE CARRIERS' ASSOCIATION.

To consider and take action upon all general questions relating to the navigation and carrying business of the Great Lakes, maintain necessary shipping offices and in general to protect the common interests of Lake Carriers, and improve the character of the service rendered to the public.

PRESIDENT.

VICE PRESIDENTS.

SECRETARY.

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Chicago

Toledo

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Alpena

Fairport

H. A. Hawgood, Cleveland David Vance, C. W. Elphicke, A. A. Parker, G. L. Douglas, G. A. Tomlinson, Chas. A. Eddy, F. J. Firth,

Leander Burdick, Milwaukee Chicago Detroit Buffalo Duluth Bay City Philadelphia

M. J. Cummings, Alvin Neal, James McBrier, H. Westbrook, F. W. Gilchrist, G. E. Tener,

Port Huron Ogdensburg

Buffalo

TREASURER GEORGE P. MCKAY,

Cleveland

COUNSEL. HARVEY D. GOULDER,

CHARLES H. KEEP,

Cleveland EXECUTIVE COMMITTEE. Cleveland William Gerlach, Cleveland Detroit L. C. Waldo, Cleveland D. C. Whitney, Detroit Cleveland

Thos. Wilson, M. A. Bradley, John Mitchell, L. M. Bowers, H. G. Dalton, W. C. Richardson, B. L. Pennington,

James Corrigan,

H. A. Hawgood,

Cleveland Cleveland Cleveland Cleveland Cleveland Cleveland

W. P. Henry, J. J. H. Brown, E. C. Maytham, R. P. Fitzgerald, C. W. Elphicke,

Buffalo Buffalo Buffalo Milwaukee Chicago

LAKE CARRIERS' ASSOCIATION.

MEETING OF THE EXECUTIVE AND FINANCE COMMITTEE.

A meeting of the finance and executive committee of the Lake Carriers' Association was held at the office of Captain James Corrigan, Cleveland, on Tuesday afternoon. The members present from other ports were A. B. Wolvin, of Duluth, C. W. Elphicke, of Chicago, and Captain J. J. H. Brown and Secretary Charles H. Keep, of Buffalo. The meeting was called for the purpose of fixing the salaries of the officials of the association, including the shipping masters, and adopting a schedule of wages for the men employed on the boats. The officers' salaries will be the same as last year. The new schedule of wages adopted, which will go into effect April 1, is the same as the opening card for season of 1897. The outlook in the freight situation is about the same as it was then and the members decided to make no change. The steamers are divided into three classes and the consorts and sail vessels into two classes. Steamers of the first class have water bottoms and triple expansion engines. The second class includes all metal steamers not included in class I, and all wooden steamers with triple expansion and with compound engines and the third class takes in all the small steamers with high pressure or low pressure engines, covering all boats not included in the two former classes. The schedule follows:

## ON STEAMERS.

	First class per month	Second class per month	Third class per month	
Chief engineer	\$105	\$90	\$60 to \$75	
Second engineer	70	65	50	
First mate	75	65	50 to 60	
Second mate	50	40		
Cooks	50	45	40	
Helpers to cooks	15	12		
Firemen	30	30	25 to 30	
Wheelsmen	30	30	25 to 30	
Lookouts	30	30	25 to 30	
Deckhands	15	15	15	
Oilers	30			

ON CONSORTS AND SAIL.

35

30

30

\$30 to \$40

20 to 25 .....

First mates....

Second mates....

Cooks .....

Seamen .....

Firemen fitting out and laying up, \$1.25 per day.

A. R. Rumsey was re-appointed chief shipping master. The other shipping masters are: J. W. Hanson and Captain William Anderson, Chicago; Capt. Frank Brown, South Chicago, vice Maynard Fish; Capt. Lemon, Milwaukee; Capt. Fletcher, Buffalo; Capt. Pat Mitchell, Toledo; Capt. Dan Harrington, Ashtabula, and William Wall, assistant, Cleveland.

The Buffalo grain handling contract was discussed and in order to get matters in good shape by the opening of navigation Messrs. A. B. Wolvin, of Duluth, James E. Davidson, of Bay City, Capt. J. J. H. Brown and C. H. Keep, of Buffalo, and Capt. James Corrigan and H. Coulby were appointed a committee to confer with Contractor W. J. Conners and the Buffalo elevator managers. A meeting is to be held at Buffalo on Wednesday.

### OFFICERS ON DUTY AT LAKE STATIONS UNDER THE LIGHT-HOUSE ESTABLISHMENT.

Inspectors-Ninth district, Lieut. Commander C. O. Allibone, U. S. N., Room 1431 Marquette Building, corner Adams and Dearborn streets, Chicago, Ill. Engineer-Major Milton B. Adams, U. S. A,. 18 Bagley avenue, Detroit, Mich.

Inspector—Tenth district, Commander Franklin Hanford, U. S. N., Ellicott Square, Buffalo, N. Y. Engineer-Major William S. Stanton, U. S. A., Second National Bank Building, Oswego. N. Y.

Inspector-Eleventh district, Lieut. Commander Duncan Kennedy, U. S. N., U. S. Public Building, Detroit, Mich. Engineer-Major Milton B. Adams, U. S. A., 18 Bagley avenue, Detroit, Mich.

## LAKE TEMPERATURES.

The annual report of the city engineer of Milwaukee, Wis., contains some interesting information regarding lake temperatures. The observations made by him cover a period of thirteen months. He found that the sudden changes in temperature of the water occur mostly in June and partly in July and August. During the months of October and November there is a uniform and steady 7 degrees per month, without more than I degree variation; during December and January there is a similar decline of 3 degrees per month, and during February a drop of I degree, reaching the minimum temperature of 34 degrees Fahrenheit near the end of the month. During March there is a steady and uniform rise of 2 degrees, and during April one of 6 degrees, May 4 degrees, and in June a rise of 3 degrees, with a sudden increase of 8 degrees in a few hours and a corresponding drop in a short time. The observations will be continued during the coming summer and the result reported, independent of the Weather Bureau branch of the Department of Agriculture or the hydrographic offices established at the several lake ports.

## MARITIME LAW.

THE TOPGALLANT.

RICHARDS ET ALL. V. THE TOPGALLANT (BASTRUP, INTERVENER).

District Court, D. Washington, N. D., January 3, 1898. SEAMEN - LEAVING VESSEL - ABUSIVE TREATMENT-WAGES.—Seamen are not justified in leaving the ship by reason of abusive words from the master, nor is their subsequent statement to him that they desire to leave the vessel, coupled with a demand for their wages, such insolence as will justisfy him in discharging them, and claiming forfeiture of their wages. And where, in such case, he tells them that they may leave, but that he will not pay their wages, they are entitled to recover, not full wages, but wages only to the time of leaving.

This was a libel in rem by Eugene Richards and others against the bark Topgallant to recover seamen's wages.

HANFORD, District Judge. This is a suit in rem to recover

wages, commenced by part of the crew of the bark Topgallant, in which the first mate has filed an intervening libel, also claiming wages. It appears by the pleadings and proofs that the libelants and the intervener shipped at San Francisco for a voyage to Puget Sound and return, and they proceeded in the vessel from San Francisco to Port Blakely, and thence to Seattle, and, while at Seattle, engaged in taking in cargo, there was difficulty between them and the captain. The captain had given orders to the first mate to move the vessel to a different position for convenience in receiving coal, and the mate neglected to have this done until after working hours. After 7 o'clock in the evening the mate asked the men if they would then haul the ship, to which they answered that they would not, and the vessel was not moved that night, and in consequence of this neglect she was delayed in lading. The captain was absent from the ship from the time of giving the order to the mate until the next morning. On being informed by the mate that the men had refused to haul the ship when requested, he reprimanded the crew, and ordered a discontinuance of coffee and a luncheon which, until that time, during the loading of the vessel, had been served to the men at 9 o'clock in the forenoon, as an extra in addition to the regular breakfast, dinner, and supper. There is a conflict in the testimony as to the conduct and exact words of the captain at this time, and as to threats which the men allege he made of future severity. A day or two after this occurence, these libelants informed the captain that they wished to leave the ship, and asked him for their wages, which he refused to pay. He informed them, however, that the could leave the vessel if they wished to, but that, if they did leave, he would not pay them their wages. The libelants did leave the vessel, and, after filing their libel, one of them returned to the vessel during the absence of the captain and the mate, to induce other members of the crew to desert. When the captain returned, finding the man there, and the purpose for which he came, he became angry, and, the mate having returned about the same time, he gave expression to his anger by upbraiding the mate for permitting the man to come on board, using expressions which were offensive, and refused to hear the mate's explanation. After this occurrence, the mate informed the captain that he wished to leave the vessel, and the captain told him to do so at once, but refused to pay him.

It is my opinion that the libelants were not justified in leaving the vessel before termination of the voyage for which they shipped, by reason of abusive treatment at the hands of the captain; neither was their conduct disobedient or insolent to such a degree as to authorize the captain to discharge them, and claim forfeiture of their wages. The libelants, however, wished to leave the vessel, and so informed the captain; therefore, they cannot claim that by telling them to go the captain discharged them unjustly, so as to entitle them to wages for the en ire voyage. Upon being told by the captain that they could leave the vessel, they had a right to take him at his word, so that their contract for services in the vessel was, in effect terminated by mutual consent. The captain seems to have acted upon a mistaken idea that the wages of seamen are forfeited, by quitting the service before fulfillment of the entire contract, even when in doing so there is no disobedience. But in law seamen cannot be treated as deserters, and their wages forfeited, unless they leave the vessel and remain absent, without leave of the commander. The rule is that, when the seamen's contract is terminated before conclusion, by mutual assent, the seamen are entitled to wages for the time of their actual service at the rate fixed by their contract. If the captain discharges them before termination of the voyage, without justifiable cause, they are entitled to wages for the entire voyage, and the amount of their expenses in returning to the port of discharge. Deserters from a vessel are not entitled to anything.

## NEWS AROUND THE LAKES.

### CHICAGO.

Special Correspondence to the Marine Record.

A great number of engineers and many captains are here getting their vessels fitted out for the early opening of navigation.

The car ferry steamer Pere Marquette left Manitowoc at 10 a. m. Tuesday, for South Chicago, to go into the Chicago Ship Building Co.'s dry dock for repairs.

The Wisconsin & Michigan R. R. Co.'s tugs and barges are be ing fitted out at South Chicago. The tugs Fischer and Ames will each tow two of the carrying barges, tug Crosby will be stationed at Sturgeon Bay, and the company will endeavor to get along, at Chicago and South Chicago, without one extra tug.

The three Ogdensburg steamers, A. McVittie, H. R. James and W. A. Haskell, were chartered, last week, for 200,000 bushels of corn. There are two steamers here yet to be placed, with capacity for 130,000 bushels of corn. There are several line steamers under charter for grain, and some will be held for general cargoes exclusively.

There is nearly 13,000,000 bushels of grain afloat in Chicago river on steamers and barges, and but a very few vessels remaining to take loads. A few more will probably arrive from Milwaukee and Manitowoc before the opening of the season. Many of the grain laden vessels will leave this port early in April.

The Lake Michigan & Lake Superior Transit Co. have chartered the steamer Jas. Fisk, Jr., from the Union Trans. Co., of Buffalo, for the coming season, to take the place of their steamer City of Duluth, which became a total loss recently off St. Joseph, Mich., the time being too short for the company to get a new steamer built for their coming season's work.

The Dunham Towing & Wrecking Co. towed the steamers A. McVittie, H. R. James and W. A. Haskell to the Alton elevator, the schooner Geo. J. Boyce to the National elevator, Steamer Phenix to Armour's "C" elevator, steamer St. Paul to Armor's "D" elevator, steamer Simon Langel to the Indiana elevator, steamer Livingston to the Central elevator to load grain.

The Independent Tug Line tug Rita McDonald, which left here Monday evening for Milwaukee to tow the steamer Majestic to South Chicago to load grain, went ashore Tuesday morning, about two miles south of Racine piers. The Special Correspondence to The Marine Record. tug Welcome went to the McDonald and released her, both tugs then proceeded to Milwaukee for the Majestic. River work done this week was towing the steamer Sanilac to Miller Bros.' dry dock, the steamer Louisiana to the Central elevator and the barge A. T. Stewart to the Rock Island elevator to load grain.

I met Capt. James Davidson, the well known West Bay City shipbuilder and owner, here this week, on his return from a southern tour. Picking up a copy of the MARINE RECORD in the office of J. A. Calbick & Co., he said to me, "your paper has a very large circulation, I see it everywhere I go, even down south at places where I have been visiting." This from Capt. Davidson is a great deal like praise from Ceasar himself and I felt it was rather a compliment to the RECORD as well as its local representative. Of course the ordinary reader does not think about your circulation in the Southern states, much-less the United Kingdom, or the list of Nagasaki subscribers and Chinese mandarins who peruse its columns.

Capt, Tom Honner, of the steamer Wisconsin, has received the appointment of inspector of hulls for the Grand Haven district, and he is daily receiving well deserved congratulations from his many friends. Capt. Honner is widely known and much respected. He has been master of the steamer Wisconsin, on Lake Michigan, the past ten years, prior to which he was master of the steamers Iron Age and Iron Duke, of the Millen fleet of Detroit, for five years, and previous to that he was master of the Detroit river tugs, John Owen, Gladiator, W. A. Moore and Castle, and has sailed on the lakes thirty-six years. Captain Tom has been quite a fortunate master for marine insurance companies, as during the many years he has been in command of steamers and tugs they have not been called upon to pay more than about \$600 damages for mishaps to any vessels under his charge.

## DETROIT.

Special Correspondence to The Marine Record.

Harbormaster O'Neil has opened his office for the season.

Mr. Schantz, passenger agent of the D. & C. line, is slightly under the weather, suffering from a severe cold.

The ice-king has had to abdicate and free navigation on lakes Huron and Erie has set in. The steamer Pilgrim is on her route between this port and Alpena.

Work at the dry docks is more than brisk. Four tugs were in dock at one time this week. The Stevenson barge Pauly has docked for a general overhauling and repairs.

Capt. Andrew Gains, of the steamer Bulgaria, now lying at the dry dock, received a letter from his owner, James Corrigan, asking if he could get the vessel ready to go to Toledo this week.

Capt. John Desana, for 24 years captain of the steamer City of Wyandotte, has purchased the steamer Douglass

from Toledo parties. The price paid was \$3,000. The captain intends to run her as a passenger boat between Detroit, Wyandotte and Trenton.

The Merchants' Transportation & Storage Co., with a capital stock of from \$100,000 to \$5,000,000, is seeking incorporation in New York. Its incorporators are Evan Thomas, Thomas A. McIntyre, E. G. Burgess, Vincent Loeser, Turner A. Beall and Arthur McKnight, for Erie Canal traffic.

Gus. Shantz has out a new pictoral card announcing the opening of navigation on the D. & C. line. It represents a chic young miss in fetching boat costume, lifting the lid of a saratoga on the dock, and discovering therein a miniature of one of the D. & C. boats plowing its way across a trunk full of water.

A large number of passengers availed themselves of the first trip of the City of Detroit and left for Cleveland on Monday night, returning Tuesday and arriving here all well on regular trip time. Great credit was given the company for the excellent and elegant manner in which they have fitted out their boats for the passenger season.

Senator McMillan succeeded in having passed the pending resolution directing the Secretary of War to dredge the Rouge river beeween the Wabash bridge and Maple Grove, below Detroit, to obtain a thirteen-foot channel. This resolution carries no appropriation, but authorizes the expenditure of \$5,000 from an appropriation already made.

### MANITOWOC.

Special Correspondence to The Marine Record.

At Burger & Burger's shipyard the Goodrich Trans. Co.'s steamer Georgia, formerly City of Ludington, received So feet new stern, 16 feet being added to her length, entire new main deck frames and deck, about one half new promenade deck, all new stanchions, plank, sheer, upper and lower rails, entire new guards, new stringers inside and out, new stem, new plank forward, new bulwarks all around, new pilot house and texas, cabin remodeled and after end of cabin extended, steel plates 12 by 34 inches put on arches, and new pointers put forward and aft, calking all over and ironing for winter service, and two new spars. The Georgia also received a new fore and aft compound engine and a marine boiler, to be allowed 135 lbs. steam pressure. With the remodeling and improvements made on her she will be a more handy and better fitted boat than when new.

### PORT HURON.

Robert Close is in Chicago helping to fit out the steamer Tom Martin.

Engineer Pelkey will act as second engineer on the steamer Brazil this season.

Engineer Tony Ryan left on Wednesday for Chicago to fit out the steamer Canesteo.

Frank Van Liew has returned from Texas, where he has been visiting his daughter, Mrs. Malcom Dewer. Capt. W. W. Stewart, formerly of the steamer Ionia, will

command the steamer Simon Langell this summer. Harrison Butler, of Marine City, is spending the week in

Port Huron helping to fit out the steambarge Simpson. The river front begins to assume a livelier appearance. Repairs are being made on many of the vessels that wintered

here. The Thompson Towing & Wrecking Association have bought the barge W. W. Stewart. They have not decided yet what will be done with her. The barge was owned by

Horace Runnels. Captain Thomas Currie has purchased the barge A. C. Keating from Captain Ryan and others of Saginaw. Terms private. She will tow with the steamer New York, with the Grandy and Golden Rule.

Capt. George Plough, who for many years has been in charge of the Sand Beach life-saving station, has arrived in the city and will take charge of the new station on the lake shore. The new station will be one of the best equipped on the chain of lakes.

the grocery store of Jas. A. Hope in this city and will embark in the grocery business. They have both been lumber shippers at Oscoda for the last fifteen years and will continue the business at that point.

St. Clair river is now entirely clear of ice from this city to below Algonac and the steamer Mary makes her trips to that point. Lake Huron is also free of ice as far as the eye can reach, the south wind of the past two days having driven all there was further up the lake.

Sam. G. Bettes, the cowboy preacher and evangelist as he calls himself, is building a galvanized iron canoe, 19 feet long by 46 inches beam, and in two weeks with his son, will start for a prolonged voyage. He will travel down Grand river to Grand Haven, coast around the lakes to Buffalo, take the Erie canal to New York and thence coast to Galveston, where the railroad will be taken to the Pacific. The boat will be coasted north to Oregon and next season will be headed for the Yukon. The boat has air-tight compartments and room for baggage and will be equipped with sails. Bettes hopes to reach the Pacific early next season. He will preach along the way.

### SHEBOYGAN, WIS.

Special Correspondence to the Marine Record.

Grand Traverse Bay is entirely free of ice now.

The vicinity of Sheboygan is entirely free of ice at present.

The steamer Queen of the West cleared light from Manitowoc Sunday night.

Wm. Fitzpatrick left yesterday to ship on one of the Manitowoc winter fleet as cook. The revenue cutter Walter Q. Gresham will go into com-

mission at Milwaukee on April 1st. The schooner Eliza Day is being scraped and painted, and

the R P. Mason is receing a new jibboom.

James Long left last week for Manitowoc, to fit out the steamer Andrew Carnegie as one of the oilers.

George Schneider left Wednesday for Milwaukee, where he will fit out the steamer John Schroeder as mate.

Work is very brisk at present on the Sheboygan winter fleet, getting them ready for the opening of navigation.

Capt. Thos. Williams, in charge of the branch office of the MARINE RECORD at Chicago, paid Sheboygan a visit last week and called on his old friends. From here he proceeded to Manitowoc. Your correspondent here had a very friendly visit with him during his stay.

The first vessel of the season to clear from this port was the schooner Surprise, which left Tuesday morning for Milwaukee where she will be used as a lightship at the breakwater. Peter Claasen, who has an eleven year contract to furnish the breakwater light at Milwaukee, purchased the Surprise from Capt. Ole Groh and Wm. Lorenz.

### MARINE CITY.

Special Correspondence to the Marine Record. .

Mr. Wedow, of the firm of Mitchell & Co., Cleveland, paid his friends a visit last week.

Capt. C. T. Morley is overhauling his schooner yacht Ethel and putting her in shape for pleasuring this season. By the way, Capt. Morley is about closing his second term as mayor or this city, and the feeling is expressed that he can have it some more if he wants the office.

At Lester's yard the steamer Kittie M. Forbes is receiving extensive repairs, the George King is getting new deck frames, and the Minnie Ortin and J. R. Edwards a general overhauling. Mr. Lester returned last week from Green Bay, where he has been engaged in doing repair work on the Biwabik, Anderson, Havana, Sparta and William A. Young.

Alexander Anderson has on the stocks a steamboat which he is building to the order of A. F. Price, Fremont, Ohio, to ply in a special trade on the Fremont river. The other owners are Isaac Lincoln, of Dakota, and Capt. Peter Ekbert. She is 130 feet keel, 142 feet over all, 30 feet beam and 4 feet depth of hold. She will have three hatches and two spars, water-tight bulkhead aft of forward hatch for trimming ship while on Fremont river, steel keelsons and arches, steam windlass and capstan and stockless anchors. Her engine will be fore and aft compound 16, 32 x 26 and the boiler 8½ x 13 feet with a pressure of 130 pounds, with an iron boiler house. She is to be called the Isaac Lincoln and will be sailed by Capt. Ekbert.

## BUFFALO.

Special Correspondence to The Marine Record.

The large steamer Empire City will leave here at the end of the week for Lorain where she will be placed in the dry dock of the Cleveland Ship Building Co.

The Northern Steamship Co. will put the large twin screw passenger steamers North West and North Land in commision June 14th. The steamers will run on the same schedule as last year.

Breakwater work will be begun in a very short time, and Hughes Brothers & Bangs, who have the contract, are fully prepared to push the improvement. The new tug George H. Dunbar, to be used for towing, and the large new scows are all ready for business. There is \$900,000 available for the new breakwater work.

The Union Transit Company appointments show a general transfer among the masters. Capt. McIntosh, who goes into Chas. O. Duncan & Mr. Fish, of Oscoda, have purchased the J. V. Moran, had the Avon last season. Capt. McGuire of the Fisk, and Capts. Tyrney and Clarke of the Portage and Ward, were mates of their steamers last season. Mates make masters, for, as the RECORD said some time ago, owners and managers don't pick up shoeblacks to take charge.

> The contractors have begun a large number of timber cribs in the harbor, but will not finish them till they are towed to the Stony Point end of the work. The contractors will open on the work with three of their own tugs and four or five chartered, ten wooden and five steel scows with a combined capacity of 5,395 yards, nine canal boats, of 2,250 tons, and eight flat scows, of 2,950 tons capacity, besides one large ten-yard dredge and two smaller ones and two derricks.

> The municipality has concluded to begin the improvement of Buffalo river at once, and some of the work has been let. The present plan is merely to deepen the channel as it is, without undertaking to straighten it, as the relief of the overflow sufferers is the primary object of the improvement, but those interested in a navigable stream up to the east-side lumber yards will not give up the effort till there is good water all the way, and it looks as though they were going to succeed in their efforts.

Maj. Symons, Corps of Engineers, U. S. A., in charge of the conservancy and improvement of the river and harbor at this port, has decided to name the departmental survey boat now building at Toledo, and to be used by him and his staff in inspecting government work, the Gen. John M. Wilson. This is out of compliment to the Brigadier-General, Chief Engineer of the United States Army. The small steamer, which is to cost about \$12,000 is to be delivered here April 15th. The Craig Ship Building Co., Toledo, have the contract and the boat is well along towards completion. Local papers as well as dailies at other lake ports insist on building this little craft in Cleveland, while the contract was perhaps given out in a hurry, the Toledo firm got it all right.

The Pennsylvania Company has loaded the barge John C. Fitzpatrick with hard coal and has the steamer Hope loading, with the John Owen to follow. The same dock will give the steamer Plankington a cargo of salt. It is supposed that the shipments are all for Chicago, but both shipper and broker are slow to talk about the matter. All that can be learned is that a rate has been agreed upon, but whether it is a flat one or contingent on offerings later cannot be learned. At the Rochester & Pittsburg dock the schooner Armenia is loading soft coal for Duluth, and the steamers Shenandoah and Sacramento are to load at once. There is said to be no rate on this coal either, but some people think otherwise. This early loading really signifies very little, as other shippers have no coal in stock and the amount moved before May promises to be small nothwithstanding the early start.

### CLEVELAND.

Special Correspondence to The Marine Record.

The steamer Albert Y. Gowan left Sunday for Kelley's Island.

The Cleveland dry dock is wet, that is to say, there is no vessel dry there today, but the Henry Chisholm is expected to dock to-morrow.

The Industrial World of Chicago has combined with the Iron Trade Review and an enhanced publication is not only promised but assured.

If a naval shipping office is opened here the engineer and pilots not already engaged will have a chance to gain employment the year round.

Captain Thos. Wilson, manager of the Wilson Transit Line, visited Chicago, on Wednesday, in the interests of his fleet, which now aggregates well over 30,000 tons.

The body of Capt. Wm. Russell has been found at Ashtabula Harbor after being immersed for several weeks. He was ship-keeper for the Menominee fleet when he was drowned.

That little survey boat for the U.S. Engineer at Buffalo is not being built here as so many papers will have it. The Craig Ship Building Co., Toledo, were the successful bidders on that contract and got it.

Mr. Frank E. Kirby, of the Detroit Dry Dock Co., and Mr. Norman B. Conger, inspector and marine agent of the Weather Bureau, were among the passengers on the first trip of the City of Detroit, arriving here on Tuesday morning.

Most of the masters and engineers for the local fleet of vessels who have received their appointments are either busy fltting out or preparing to do so. Quite a number of engineers have been sent out of town to fit-out the engines of boats laid up at other ports.

Mr. Truman P. Handy has been seriously ill for the past two weeks and his medical advisers are now in constant attendance upon him. Mr. Handy has been identified with the marine insurance business on the lakes since half a century ago. He is now a nonagenarian.

While the Lorain dry dock of the Cleveland Ship Building Co. is kept as busy as it possibly can be, the two docks at this port are not to say crowded with work, the Ship Owners' dry dock is still working on the schooner Warmington as reported last week, though the job is about finished.

Mr. Osier, the western representative of Messrs. DeGrauw, Aymer & Co., New York, informed me this week, while he was here on business for his firm, that they are now the sole manufacturers in the United States, of the Tyzack's stockless anchors, having procured all rights from the patentee.

Capt. Charles Motley, keeper of the life-saving station, expects orders, within a few days, to ship his crew again for the season. The captain's brother, from Middle Island life-saving station, Lake Huron, is spending a few days on a visit, before his station goes into active service, when he will be kept strictly at duty during the entire summer.

Edwin E. Chapman, superintendent ninth district life-saving service, stationed at Buffalo, inspected the station at this port, on Tuesday. I did not run across Capt. Chapman while he was here, but it is safe to report that he found everything in ship shape order, or rather according to the life-saving rules and regulations, at the Cleveland station.

Mr. J. F. Pankhurst, general manager, Globe Iron Works Co., has regained his health and has been so much benefitted by change of climate during the last few months, that he is expected home again in about three weeks. Many of Mr. Pankhurst's business and social friends will be pleased to hear of his recovery, as at one time his illness assumed rather a critical phase.

Chaplain J. D. Jones, of the Floating Bethel, is still to the fore with his generous patrons and board of directors. On last Sunday night about 240 people who were hungry were given a good substantial meal and AI advice on how to proceed on their course towards the "golden shore." A number of

prominent business men and their wives attended the service and the chaplain projected the true course to pursue in his usual inimitable manner.

The steamer Saxon, of the Menominee line, arrived at this port from Ashtabula, Monday. She was the first steamer to arrive this season. The Saxon has made two records this year. On January 2 she left Cleveland for Ashtabula, the last boat to sail out of here. The Saxon is now at the Globe Iron Works dock, being fitted for the package freight business. The steamer German, of the same fleet, left Ashtabula for Cleveland, Tuesday, and arrived here the same day. She, too, will be overhauled and will carry general cargo, or, as it is called, package freight.

Mr. John F. Wedow, of the firm of Mitchell & Co., says the Lumber Carriers' Association is now an assured organization and a fair living recompense will be had for carrying lumber. Mr. Wedow has done much towards bringing about a fair understanding of the situation in which those engaged in the lumber carrying trade had placed or found themselves, and he urged to good purpose, the all round benefits to be obtained by making a positive stand this season for a fair living rate of freight. This will now be obtained and is likely to continue in the future.

I mentioned, in an issue or two ago, that Capt. John Kirby and Capt. Maynard H. Murch were among the oldest and most experienced shipmasters residing on the west side. I might also have stated at the time, that Capt. George Pleasant and Capt. John Varner were still keeping well to windward, and there are others. The octogenarian, Capt. Charles Gale, Sombra, Ont., is awarded the palm as an ideal old tar, there is not a let up to him. It is hard to kill off the good old staunch, hearty stock. Flatfeet were flatfeet in the bluff old wind-jammer days of half a dozen decades ago.

At a regular meeting of the Marine Engineers' Beneficial Association, No. 2, held at their rooms, 122 Water street, the death of a late member was deplored and the following resolutions passed:

"Resolved, That in the death of our late brother and associate, James Spears, we have sustained a loss by the removal from our midst, of one who was in every respect, worthy of our esteem and confidence. Therefore, be it

"Resolved, That we forward a copy of these resolutions to the family of the deceased brother, and have same spread on our minutes.

M. E. B. A., No. 2."

Among the marine men and those interested in marine affairs, who visited in Cleveland, this week, were Messrs. John Gordon, Buffalo; O. J. Garlock, Palmyra; W. B. Miller, Buffalo; W. P. Rend, Chicago; H. C. Beeson, Chicago; C. W. Elphicke, Chicago; F. E. Kirby, Detroit; C. B. Calder, Detroit; G. E. Tener, Pittsburg; Frank Hart, Marine City; A. Osier, western representative DeGrauw, Aymer & Co., New York; L. Windmuller, Chicago; Supt. Chapman, U. S. L. S. S.; F. N. LaSalle, Duluth; A.B. Wolvin, Duluth; C. H. Keep, Esq., Buffalo; J. J. H. Brown, Buffalo; N. B. Conger, Detroit; W. A. Prime, Chicago; D. Vance, Milwaukee, and W. A. Avery, Detroit.

A good sized kick has been going the rounds regarding an inferior quality of canvas, or prepared material of some sort, for use as hatch-covers or tarpaulins, only we don't have tarpaulins any more, these were supplied to a West Bay City shipbuilder who also came in for a rap from those interested on account of the shipchandlers' outfit in this particular, and of course the ship, which by the way damaged quite a quantity of grain loaded a week or two ago, fell back on those who furnished the inferior article, which was intended for and used as waterproof hatch covers. They had, or will have, to stand all expenses, and quite right, too.

Lieutenant Stafford, U.S. N., has written to Cleveland that more men are needed for the navy. The lieutenant is now aboard the U. S. ship Columbia. Although it was reported some time ago that Lieutenant Hawley, U. S. N., would come here to enlist naval recruits, he has not as yet appeared. The Cleveland recruiting office has had quite a few applicants for enlistment in the navy. These applicants have been of all grades, seamen, machinists, firemen and raw recruits. There was a rumor, this week, that because of the April 1. number of applicants for the navy here, the U.S. ship Michigan, now serving as a recruiting stration at Erie, Pa., would be transferred to Cleveland for the same purpose. In the absence of applicants for marine engineers' positions in the navy, it is stated that locomotive engineers are being sought, under the belief they can quickly acquire the knowledge required of them in the navy.

## FLOTSAM, JETSAM AND LAGAN.

The steamer Columbia, of St. Ignace, has been making trips to Mackinac Island since last Friday.

B. B. Inman has received the government contract for removing the wreck of the steamer Winnipeg at Duluth, for \$1,500.

The ice fields at the head of Mackinac Straits will not move out for some days yet. The ice in Green Bay is weakening rapidly.

MAR

W. L. Brown, the iron magnate, estimates that 15,000,000 tons of ore will be moved from the Lake Superior district this season.

The arrival of the Atlanta, of Chicago, at Grand Haven on Tuesday marks the earliest opening of passenger navigation between those cities.

The "Soo" line will add another steamer to its fleet plying between Gladstone and Buffalo. Her construction has been awarded to the Cleveland Ship Building Co.

The propeller John Otis is being fitted out at Muskegon and in two weeks will begin carrying lumber for Hovey &

McCrachen to Michigan City. There are 2,000,000 feet to be transferred.

A uniform rate has been agreed upon by the longshoremen's unions for unloading lumber in Toledo, Detroit, Sandusky and Cleveland. The rate has not been made public, but it is expected that a slight raise will be asked.

The Chicago grain fleet, composed of 138 vessels carrying 13,000,000 bushels, will begin to move about the first of April as insurance policies go into effect on that date. The vessels now loaded are chartered from 3 cents, to the present rate, 1½ cents, the former figure being paid for winter storage from the close of navigation.

The Texas owner of the schooner Starke is so well pleased with the craft that he has commissioned Capt. Adolph Frietsch, to secure for him another of similar size, if one can be found at a reasonable purchase price. Capt. Frietsch is said to have his eye on the Fearless, owned by Capt. Herman Oertling. The Starke was recently dismantled in the Gulf of Mexico.

The Lumber Carriers' Association in defending its rate of 12½ cents per thousand for mill culls and scoots says that the charge is rendered reasonable by the extra cost involved in handling this class of material, which is usually piled in out-of-the-way places where it is unhandy to load. No extra charge will be made when they are piled with better grades of lumber.

President W. L. Brown and Manager W. I. Babcock, of the Chicago Ship Building Co., took, in Cleveland last week, a contract for an immense steel schooner. The boat will be built for the Minnesota Steamship Co. It will be 376 feet keel, 390 feet over all, 48 feet beam, and 26 feet deep. On the present draft of water, 16½ feet, in lake channels, the schooner will carry something over 6,500 tons.—Iron Trade Review.

### ICE REPORTS, RIVERS, HARBORS AND LAKES.

As to condition of ice in the Great Lakes, with reference to resumption of navigation, the following special reports were made by Weather Bureau officials on the afternoon of Saturday, March 19, 1898, according to the request of Willis L. Moore, Chief of Bureau:

BUFFALO, N. Y.—Floating ice extends from shore to shore, and as far as the eye can reach on Canadian side, but open water could be seen Friday about 10 miles up the lake on the American side. Ice badly broken up, honeycombed, and drifted in large fields down Niagara river all week. A heavy southwest wind for two days would probably clear the lake sufficiently to render navigation practicable. No ice in harbor.

CLEVELAND, OHIO.—The lake at Cleveland remains clear of ice and local navigation was resumed March 18 by the steam barge Margaret Olwill clearing for Kelley Island. Fishing tugs began making regular trips on March 15.

DETROIT, MICH.—Floating ice in river continues, but is decreasing in quantity; ice out of channel from the flats to Algonac; steamer Jenks came through Lake St. Clair on 17th, experiencing but little trouble with ice; in west end of Lake Erie, from mouth of river to Point Pelee, ice is broken, and a strong northwest gale would clear it; the up-river boat will leave morning of 20th, and the Cleveland steamer leaves night of 20th.

PORT HURON, MICH.—No ice in sight. The Star Line steamer Arundel from Detroit is expected to arrive on 20th, as the first through boat, opening navigation on St. Clair river. The steamer Pilgrim is expected to leave for Alpena on 23d instant, the first departure northward.

CHICAGO, ILL.—Navigation on Lake Michigan has not been seriously interrupted by ice during the winter. The Straits of Mackinac are now open between Mackinaw City, St. Ignace, Mackinaw Island, and upper end of Bois Blanc Island; ice still remains between McGulpin and St. Helena and between the lower end of Bois Blanc Island and Cheboygan Point; ice is rotting rapidly, and with mild weather and strong winds the straits will probably be free of ice by April 1.

MIKWAUKEE, WIS.—River and harbor at this port are entirely free from ice, and navigation to points on Lake Michigan proceeds without interruption. Latest advices as to condition of the ice in straits indicate that navigation will be resumed earlier than usual, probably by April I.

GRAND HAVEN, MICH.—The harbor in entirely clear of ice, and Lake Michigan also, as far as the eye can reach. The conditions now are extremely favorable for an early resumption of navigation, about April I. The first boat, other than the winter liners, is expected to arrive March 21.

SAULT STE. MARIE, MICH.—In the harbor there is much more open water than last week. The ice near the shore is 14 to 18 inches thick, but badly "candled." In Hay Lake ice much thinner and open water visible in numerous places. At Detour ice is broken and floating as far up the river as Pipe-Island; it is much thinner, but is not broken above the island.

MARQUETTE, MICH.—The lake as far as visible is clear of ice. A small amount of cake ice drifted into the harbor on the 16th and out on the 18th. A few fields of cake ice were observed during the week, far out in the lake, moving east. Present conditions point to an unusually early opening of navigation, with but slight, if any obstruction, from ice.

DULUTH, MINN.—It is expected that the first boat will leave for Grand Marais, between April I and 5th, and that general navigation will be resumed by April 15. In this vicinity the lake has been free from ice for the last three days. The ice in the harbor is considerably honeycombed, and has decreased one inch in thickness during the past five days.

### INSPECTOR OF THE 10TH LIGHT-HOUSE DISTRICT.

Commander Hanford was born in Chili, Monroe County, N. Y., November 8th, 1884, and entered the U.S. Naval Academy November 26th, 1862, as a midshipman. He was average speed of thirty knots per hour and upwards and a appointed to that institution from the Monroe county district displacement of from 270 to 300 tons. In taking late con-

by the Hon. Alfred Ely, M. C. Mr. Ely had then only returned from Richmond, Va., where he had been imprisoned by the Confederates after his capture at the first battle of Bull Run.

Commander Hanford graduated at the Naval Academy in June 1866, and was then ordered to duty on the U.S.S. Saco, cruising in the West Indies and Gulf of Mexico until the close of 1867. In January 1868 he joined the Kearsarge, proceeding in her to the South Pacific station where he was promoted to ensign in April 1868. In September 1868 he was transferred to the Tuscarora and cruised on the latter vessel in the South Pacific and West India stations until February 1871, being promoted to master in 1869, and to lieutenant in 1870. In 1871 he was ordered to the Wabash, flagship of the European station, and served on that vessel until May 1874. From July to November 1874 he was on torpedo duty at Newport, R. I., and then until May 1872 on the receiving ship Vermont, at New York, when he joined the Tennessee, flagship of the Asiatic station, and cruised in Asiatic waters on board the Tennessee and Ashuelot until the return of the former vessel to the United States in July 1878. He then had ordnance duty at the New York Navy Yard until June 1881 when he was attached to the flagship Pensacola on the Pacific station, as navigator until May 1884.

During the latter part of this cruise the Pensacola circum navigated the globe, taking numerous observations for the determination of the variation of the compass. Ordnance duty at the Washington Navy Yard followed from 1884 to 1886; and from 1886 to 1888 he was Inspector of Ordnance at the West Point Foundry, Cold Spring, N.Y, where modern guns were built for the new vessels of the navy. From 1888 to 1891 he was again attached to the Pensacola, this time as executive officer, having been promoted to Lieutenant Commander in October, 1885.

During this cruise the Pensacola was, at first, on special duty in South America and on the expedition to West Africa during 1889-90, and was afterwards flagship of the South Atlantic and South Pacific stations, visiting Chile at the opening of the rebellion of 1891.

at the New York Yard being promoted to commander in tubes. 1894.

In June 1895 he was ordered to command the U. S. S. Alert on the Pacific station, and remained on her as commanding officer until August 1897. During this cruise the Alert visited all the countries of the west coast of South America, from Callao, Peru, to Sitka, Alaska, protecting American interests during revolutions in Ecuador and Nicaragua, and also spent several months in the Hawaiian Islands.

After a few months leave of absence, Commander Hanfordwas ordered, in January 1898, as Assistant Inspector of the 10th Light-House District with headquarters at Buffalo, N. Y., and on the 12th of March 1898, relieved Captain Theo dore F. Jewell, U. S. N. as inspector of that district, Capt. Jewell being ordered to the command of the U.S.S. Minneapolis.

The owners of the sunken steamer Louis Shickluna, Sylvester Bros., of Toronto, report that it is not at all likely they will attempt to raise the wreck, owing to great depth of water. The steamer was sunk in Lake Erie by collision on May 29, 1897, about 43 (5) miles NE. by E. (N. 56° E.) from Long Point (or North Foreland) light tower, in 25 fathoms of water.

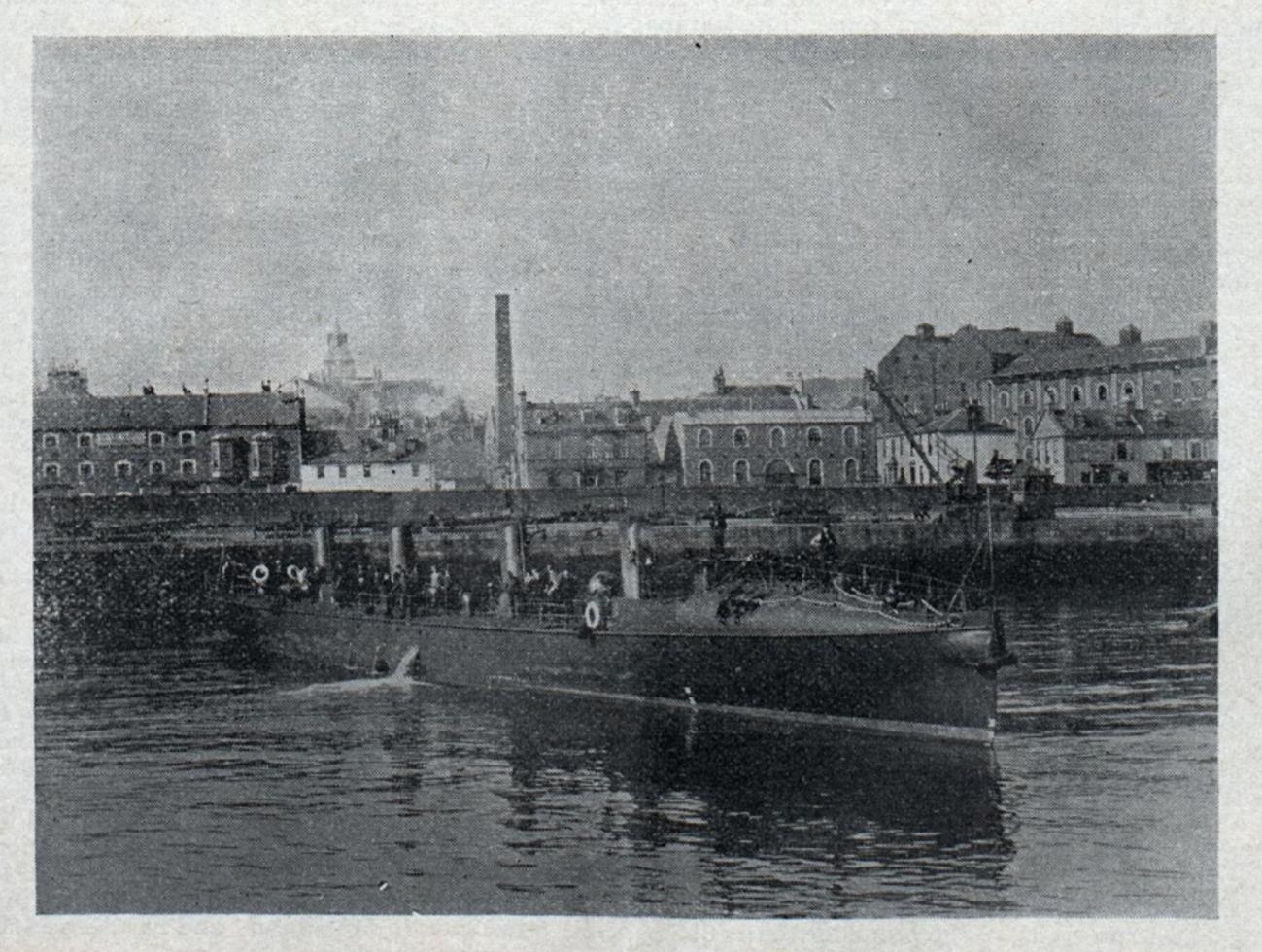
### TORPEDO BOAT DESTROYER.

We illustrated in our issue of March 10 a second-class torpedo boat. The accompanying illustration fairly represents the type of vessels used as a torpedo boat destroyer, having an



COMMANDER FRANKLIN HANFORD, U. S. N. Inspector 10th Light-House District, stationed at Buffalo, N. Y.

Atlantic coast of the United States; then conveyed a scientific tracts for torpedo boat destroyers, shipbuilders in the United steel plates, being of a flexible nature, would not break, Kingdom guaranteed an indicated horse-power of from 5,400 to 6,000, the armament consisting chiefly of one 12- the vessel to float about, striking the rocks over the whole pounder and five 6-pounder quick firing guns, four 18-inch length of her bottom before measures could be taken to From 1892 to 1895, he was senior aid to the commandant Whitehead torpedoes and two single revolving torpedo



BRITISH TORPEDO BOAT DESTROYER.

Speed, 29 knots, or 331/2 statute miles per hour. Their mission is to sight, overtake and destroy torpedo boats.

### IRON VERSUS STEEL FOR SHIPBUILDING.

At a recent meeting of the South Staffordshire (England) Institute of Iron and Steel Works Managers Mr. M. W. Aisbitt read a paper entitled, "Iron and Steel Plates and Forgings Used in Shipbuilding Compared and Contrasted." He remarked that the relative positions of iron and steel as re-

gards plates, angles, and other sections used in shipbuilding at the present day, as compared with 20 years ago, were entirely reversed. In 1878, 90 per cent. of the total material used was iron, whereas at the present time 90 per cent. of the total material was steel. Since the introduction of iron plates there had never been instituted a regular system of testing them, as had been adopted in the case of steel plates; and this was much to be regretted, as, owing to the steel plates from their first production having been invariably tested for tensile strength and elongation, they had proven more reliable. In order to induce shipbuilders and shipowners to adopt steel in the place of iron, the various registries for the classification of steamers and sailing vessels agreed to adopt a reduced scantling to the extent of 25 per cent. in the case of steel plates. This, in the case of a large cargo steamer, carrying 4,000 tons of cargo, and requiring 1,200 tons of iron material, as against 900 tons of steel, was naturally a matter of serious moment to shipowners, as it was not merely the saving of 300 tons of iron, at so much per ton, but an additional carrying capacity of 300 tons to the steel steamer on the same draft, power, expense, etc. Hence they would readily see the reason why steel so quickly replaced iron. But after some years' experience it was found that this reduction of 25 per cent. was considerably too much in many cases. Another reason for steel being preferred to iron, even in the case where it was introduced of the same scantling, was its ductility, and hence the possibility of bending it cold to any required shape. In the case of strandings, groundings, etc., he had generally found that of two given vessels which struck rocks, one steel and one iron, the iron one would cost considerably less to repair than the steel one. The iron, being of less tensile strength than steel, broke off short, locating the damage to a small area, and by so breaking would generally allow the water to enter the vessel and keep her at rest until proper means, if possible, were adopted to float her. On the other hand, the

but buckle between the various ribs, and probably allow prevent her from doing so. Steel had the advantage over iron in being to a great extent homogeneous, and, in the

case of oil steamers, more impervious to the penetrating effects of petroleum oil. Also, beyond the great advantage of ductility in working, it was found possible to produce plates and angles of a much larger section and dimensions than ever thought possible before. This added to the strength of a vessel by dispensing with a large number of butts or joints, and also decreased the cost by the less number of rivets, in some instances amounting to many thousands. His own impression was that a combination of steel and iron would be most advantageous for shipbuilding purposes, as the reduction previously spoken of-namely, 25 per cent.—was rapidly disappearing; and, considering the extra labor that the material of a cargo steamship had now to withstand, as against that of one built, say, fifteen years since, amounting to about 20 per cent. of the actual dead weight carrying capacity, this decrease was likely to proceed still further.

Mr. Ed. J. Kendall, of the Kendall Marine Reporting Company, Port Huron, Michigan, has furnished the following information: Concerning the wrecked schooner Home, she has not been removed. It is possible that the vessel has been shifted a short distance by the river ice. She is a very dangerous obstruction, and ought to be removed."

### STATISTICS OF LAKE COMMERCE.

In the report prepared by Mr. George G. Tunnel under the direction of the Bureau of Statistics, Treasury Department, and this week submitted to Congress, we find an unbiassed statement of existing conditions in the lake carrying trade, accompanied with very much commendable work on the part of the statistician.

While it is not possible to re-produce the entire report, we at least may quote such excerpts as may seem of direct local importance at this time and which we have not dealt with when quoting extracts from this report hitherto.

"The growth of commerce on the Great Lakes, as reflected by the amount of traffic passing through the Detroit river, is disclosed by the following figures, which have for the most part been taken from the report's of Col. O. M. Poe, Corps of Engineers, U. S. A. The statement covers the traffic passing both up and down the river:

COMMERCE MOVED THROUGH THE DETROIT RIVER.

YEAR.	REGISTERED TONNAGE.	YEAR.	REGISTERED TONNAGE.	FREIGHT TONNAGE.
		1889	19,646,000	19,717,860
1880	20,235,249.	1890	21,684,000	21,750,913
1881	17,572,240	1891	22,160,000	23,209,619
1882	17,872,182	1892	24,785,000	26,553,819
1883	17,695,175	1893	TOTAL STREET, THE PARTY OF THE	23,091,899
1884	18,045,949	1894	26,120,000	24,263,868
1885		1895		25,845,679
1887	AND A STATE OF THE PARTY OF THE	1896		27,900,520

the gross tonnage of steel vessels on the lakes aggregated 486,291.47 tons, or much more than one-half that of the wooden tonnage, the latter being 885,832.85 tons. Steel was the material used in the construction of about eight-ninths of the tonnage built and documented in the fiscal year 1897.

"Steam is relied upon as a motive power to even a greater extent than the statistics which have been given would indicate. The barges are towed by the steamers, and so the barge tonnage is moved by steam power. The barge tonnage on June 30, 1897, as reported by Commissioner of Navigation, was 60,783 tons. This statement does not include any of the sailing vessels that are always towed, but have not been dismantled. Nor does this statement include any of the rigged barges of new construction that now form a respectable tonnage; in the single year 1897 there was a gross tonnage of rigged steel barges constructed of 34,630,37 tons. The statistics of construction and of the lake fleet are likely to be progressively misleading if continued according to the classification which now obtains, for transportation by tow barges seems to be gaining in favor. This is in part due to the fact that the dock facilities have been so enlarged that the steamer and her consort or consorts may be unloading at the same time. Formerly, as a general thing, the boats could only be unloading in detail, and the steamer lost valuable time in waiting for the barges.

"The facts furnished by the Department of War fall under two heads: (1) those based upon the custom-house records, and (2) those collected independently. For the most part the statistics published by the War Department are based upon the custom-house returns, and no attempt is made to eliminate the errors of these returns. The statements of trafic through the Detroit River and of the business transacted at the lake ports are always, I believe, based upon the records of the custom-houses, and are therefore subject to all the criticisms that have just been passed upon these records. The statements of the traffic through the St. Marys has again given way to a well sustained demand for steam-Falls are based upon data collected at the canal by the of- ers for Cork f. o. and for berth business from the Range of

stead of the carrier were called upon for a sta'ement, there need be no delay.

"In examining the traffic statistics of the Great Lakes our attention is at once arrested by the enormous amount of iron ore that is annually transported. During the navigation season of 1897, of the 18,982,755 net tons of freight sent through the St. Marys Falls canal, 10,633,715 net tons were iron ore; the total shipments of iron ore by lake from all the lake ports aggregated 13,681,522 net tons.

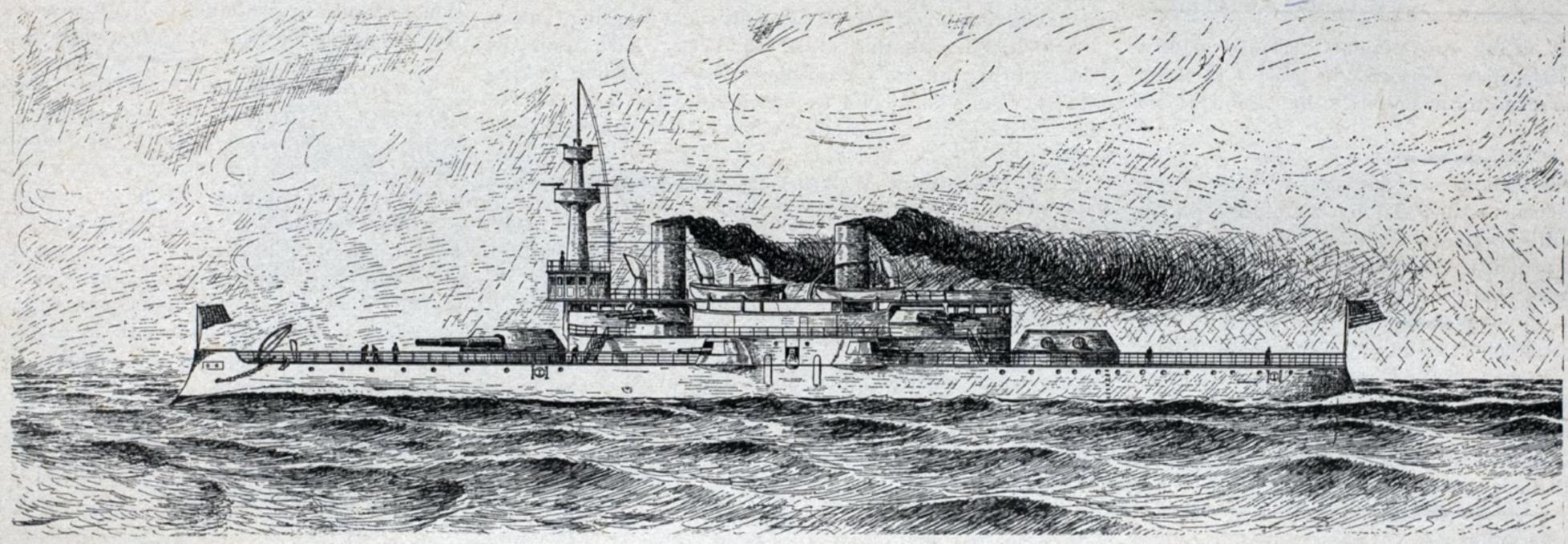
"With the finely comminuted ores of the Mesabi range, which does not run so rapidly from the pocket down the chutes as the hard and lumpy ores, vessels can be loaded in seventy minutes with 2,500 tons of ore. At Two Harbors, 3,-028 tons of hard ore were loaded in seventy minutes; vessels frequently load and depart with a cargo of 3,500 to 4,000 tons within two hours of the time they reach port. There is also great expedition in the unloading of vessels. With the appliances possessed by the best docks, the largest vessels have been unloaded in twelve to fourteen hours.

"It was estimated that the floating equipment on the Great Lakes January 1 1896, employed primarily in the transportation of ore, had a value of \$46,680,207, and it has since been largely increased."

It is well known that "primarily engaged in the transportation of ore" is just as indefinite an estimate, as the valuation -intrinsic, actual or temporary commercial, the sum of which is said to have been largely increased.—ED.

### EASTERN FREIGHTS.

Messrs Funch Edye & Co., New York, report the eastern freight market as follows: The period of comparative dullness, which prevailed during the closing days of last week "Assuming now that these figures are approximately correct ficers in charge. These statements should, therefore, ac- ports, which demand has practically absorbed what was



U. S. COAST LINE TWIN SCREW BATTLESHIP "INDIANA."

Length on water line, 348 feet; beam, 691/4 feet; draft, 24 feet; displacement, 10,231 tons. (From a drawing in "American Steam Vessels," by S. W. Stanton, New York.)

and that they all vary to the same extent and in the same direction, we find that there has been a substantial increase in the traffic passing through the Detroit river. The traffic statistics show that there was a rapid increase from 1873 to 1880, but that during the decade ending with the year 1889 there was absolutely no growth. Inferences from these figures, however, should be drawn very cautiously. I am forced to believe that either the figures for 1873 or those for 1880 are incorrect. I am of the opinion that the remarkable development of traffic from 1873 to 1880 did not take place.

"The accompanying chart clearly shows that the average tonnage of the sailing vessels has not greatly increased, and of the captains also produces inaccuracies. For example, the average tonnage of the steamers shows no remarkable the blanks furnished by the officers of the canal call for a change up to the fiscal year 1887. From 1887, however, the statement of the anthracite and bituminous coal on board, average tonnage increased by leaps and bounds. The average gross tonnage of the steamers built in 1886 was but 269.10 tons, while in 1891 it was 758.72 tons, and in 1897 1,436.91 tons. This is equivalent to an increase in size of 534 per have been made, however, it must be said that the "Soo" cent. in the twelve-year period under consideration. To enable one to form an accurate conception of the size and carrying capacity of the propellers now being constructed, I shall give the dimensions of a steamer now being built for the of traffic on the Great Lakes collected by the National Gov-Bessemer Steamship Company. She will measure 475 feet over all, and will have a beam measurement of 50 feet and a among those engaged in lake transportation. It scarcely depth of 29 feet. Her carrying capacity will be between needs to be said that the shippers and carriers are fully 6,500 and 6,750 gross tons on a mean draft of 17 feet.

"As a result of this superiority in respect of strength, very rapidly and that of wood has risen, it has become profitworld to-day no place at tide water where ship plates can be aid down for a less price than they can be manufactured or irchased at the lake ports. There is, therefore, every reason x steel vessels, with an aggregate net tonnage of 6,459 tons doat on the lake; since 1886 there has been a revolution in the material of the floating equipment. On June 30, 1897,

curately reflect the commerce passing through this gateway. Unfortunately, however, they do not, and this in spite of the fact that great care is taken by the officers in charge of the canal to secure accurate information. The efforts of the officers are balked because of the failure of the lake carriers to co-operate with them. As has already been stated, in many cases masters do not know what they have on board, and can not, even if they would, give a correct statement of their cargo. Many of the captains, however, have a supreme contempt for statistics, and so do not attempt to fill out the forms furnished to them correctly. Ignorance on the part but in some cases these items are not given correctly, because the masters do not know that these forms of coal correspond with hard and soft coal, respectively. After all criticisms canal statistics are the best on lake traffic collected by the government.

"Before leaving this subject I must say that the statistics ernment are simply an object of contempt and ridicule aware of all the criticisms that I have made. The methods of collecting these statistics ought to be radically changed, elasticity, buoyancy, and durability, the preference for steel if tor no other reason, simply because the government can has become very decided and as the price of steel has fallen not afford to permit its work to be held up to scorn. Lake shippers ought gladly to co-operate with the government, for able to substitute steel for wood. There is probably in the au accurate knowledge of the situation is absolutely necessary in order to enable Congress to make a wise appropriation of money to facilitate commerce on these waters. Without a positive basis of facts it is impossible to plan a r steel being substituted for wood. In 1886 there were but judicious scheme of improvements. Any change in the regulations governing the collection of statistics which will delay traffic may be expected, in the future as in the past, to meet the opposition of the lake carriers. If the shipper in-

readily available of tonnage to serve for prompt and April loading, with some slight enquiry leading into May. Rates show no appreciable change from those established during the preceding week, except as to Danish options, which have advanced 11/2d. Vessels are not offering freely, and a continuation of the present demand for grain tonnage may result in some advance over present figures shortly, especially since berth freights are stiffening up, consequent upon very large engagements for the next few weeks' departures. This movement has again caused better enquiry for large boats on time charter and some fixtures, although the figures now offering are not up to the best of those secured some weeks earlier. On the other hand, the enquiry for tonnage from the Gulf ports, (excepting March boats) for timber, for cotton from the Atlantic ports and for case oil is very light, and does not at all contribute to the strength of freights from the north.

Business in sail tonnage for the past week has again been light, owing to the difference in views as to freight held by owners and charterers respectively, but the market remains firm and rates hold their own.

M. Payne, sub-collector of customs at Port Stanley, Ontario, reports that the spars of the wrecked schooner Groton dispppeared early in January and were supposed to have been cut off by the ice. The hull of the vessel is no doubt in the same spot she sank, as both the anchors are down, and she lies in water so deep that ice can not disturb the hull. The Groton sank on November 11, 1897. She had been anchored to ride out the moderate gale then blowing, intending later to make Port Stanley. After coming to anchor, the schooner pitched so heavily and shipped so much sea as to pull the jibboom out of her, which carried the foretopmast with it. The hull was opened up forward so much that she made water rapidly in spite of the working of the pumps. The crew was compelled to abandon her; the vessel sank soon after they had taken to the yawl boat.



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## CLEVELAND, O., MARCH 24, 1898.

ONE of the most fitting appointments recently made in the Steamboat Inspection Service, is that of Capt. Thomas Honner as inspector of hulls for the Grand Haven district.

THE thanks of the RECORD are due the Weather Bureau for a copy of an ice chart issued March 22d, under the direction of Prof. Willis L. Moore, Chief of Bureau. The ice conditions at the principal ports on the several lakes are recorded on the small chart.

WE have had a Russian vice-admiral of the Russian navy inspecting the ice crushers on the lakes this week. The viceadmiral, who, by the way, is also a Russian nobleman rated as and named Count Makaroff, visited Mackinac and also Conneaut, O., sighted the railroad car-ferry ice crushers and conversed with their captains at each port.

Nothing had been published, for obvious reasons, but it was well known that the revenue cutters built by the Globe Iron Works Co., two of which are now being completed, were little fighting ships and fitted as torpedo boats. Orders have now come to transfer these handsome speedy vessels to the Navy Department and equip them as originally intended should any emergency arise.

In these days, when those practically engaged in the lake service are striving to become more efficient and proficient in their work, there should be no lax or ambiguous language used in the promulgation of new regulations issued for their guidance by the various government departments. The RECORD has frequently been compelled to allude to many of these discrepancies emanating from the several marine departments at Washington, and no later than last week we took occasion to point out some singular reading in Sailing Directions for the Gulf of St. Lawrence, issued by the Hydrographic Office, U. S. N., Washington, D. C.

WITH the contract awarded this week to the Cleveland Ship Building Co., by R. R. Rhodes et al, of Cleveland, and of dimensions such as can use the Welland canal, and the placing of a new contract for a 400-foot, 6,000-ton high classed steel steamer, specifications have been sent out for a new fire boat for Chicago, to be the peer of anything yet built as a fire boat, and, also, bids asked for a large steel car ferry for the Toledo & Ann Arbor Railroad Co., as announced in these columns last week. In the near future bids are to be asked from lake shipbuilders for the construction of a U.S.S. for lake service, to replace the obsolete vessel now in use, and with the addition of departmental tonnage for the revenue marine and the light-house service, lake yards are likely to be kept busy for some time.

### VESSEL VALUES.

THE U. S. Commissioner of Navigation must have been hard put to it in making up the latest list of vessels of the United States and their tonnage when he found himself compelled to include five-ton craft in his blue book and some of them thirty years old at that. A collaborator of lake statistics who boasts of always being right in furnishing figures regarding lake work, takes from the Commissioner of Navigation the totals given in his annual report and holds it forth as tonnage engaged in lake work as follows: Steam, 1,775 vessels having a gross tonnage of 977,235 tons; sailing craft and barges, 1,094, gross tonnage 394,889, or a total of 3,869 vessels of 1,372,124 tons, valued at \$85,000,000. This would Manager. give us a valuation of \$62 per ton gross for every ton afloat on the lakes, though, it is well known that a large proportion of the carrying capacity is rated and held at about \$10 per ton, there being quite a number of 500-ton schooners that would be well sold by their present owners at \$5,000. There is no merit, or credit, or for that matter discredit either, in hanging out a sign quoting the figures compiled each year on shipbuilding by the Commissioner of Navigation (whose office was created especially for the purpose of presenting such a compilation to Congress,) but there is a distinctly misleading and ignorant phase to the part of placing a round value on the aggregate lake bottoms, such estimates, like attempting to get at the entire movement of commercial transportation on the lakes, is not only harmful but as we have said is positively misleading, and the RECORD would never attempt to deal with such ignorantly computed estimates, or place an intrinsic worth or commercial valuation (and there is a wide difference here) on any firm's tonnage. The leading editorial in our issue of February 17, under the caption of "More Lake Statistical Juggling," dwelt at some length with this subject and may have been the means of the editor of the Shipping World, London, looking into the matter a little, for we find in the latest issue to hand of that excellently edited marine journal the following paragraphs:

"I had the curiosity, the other day, to compare the insured value of two steamers over seven years. One of these is an old steamer which, seven years ago, was insured for £10,000 (\$50,000) in addition to the freight. Now she is insured for £3,500 (\$17,500). The second is a modern vessel that was new seven years ago. She was then insured for £21,500 (\$107,500). This insurance year she is insured for £17,000 (\$85,000). But, on looking at other insurance records, I find that some steamers are, in consequence of the advanced value, insured a little higher this year than last."

"It is a little startling at first sight to find the difference in value of steamships. I learn that, recently, one of the great steamship companies ordered an ocean liner and a really good cargo boat. The latter cost, when delivered, about £6 10s. (\$32) per ton of carrying capacity. The mail steamer, which has splendid passenger accomodation, costs £64 (\$320) per ton of cargo-carrying capacity. Put into totals, one steamer cost about £45,000 (\$225,000) and the other about £220,000 (\$1,100,000)."

Anyone desiring to arrive at an approximate value of lakebuilt tonnage (and there is some of it that might now be exchanged for a good wholesome sandwich) would have to divide the whole into a number of grades, build or class so as to arrive at an actual or material worth, without reference to the present commercial value of the property. It is to be hoped that the RECORD will not have to call attention to these ignorantly and carelessly computed supposed statistical conclusions any more, or at least for awhile.

RELATIVE to the Carnegie letter which has been so widely quoted, we said in our issue of March 10: "Of course it is all right to start another steel shipbuilding plant on the coast, and Mr. Carnegie no doubt would like to supply all the steel that a dozen prosperous shipyards could use. By the way, are the eastern yards overcrowded with work and refusing new contracts at this time? The first requisite towards establishing a shipyard is to have a ship to build, and it would be well to consider how many intending or wouldfor a steel steamer which can enter the Lake Ontario trade be shipowners are interceding with eastern shipbuilders to be given the privilege of placing in their hands lucrative contracts for new tonnage. France has a couple of first class subsidised shipyards for rent or purchase just at this time, chiefly, or rather solely, on account of having nothing to build." Mr. Henry W. Cramp being asked by the Iron Trade Review regarding this matter says: "With regard to the letter of Mr. Andrew Carnegie, relative to the establishment of a shipyard at New York, and the comments made on it by the various papers and shipbuilders, to which you call my attention, I remark that from my point of view the question raised by Mr. Carnegie does not seem at this time to demand discussion. So far as I can see the real need of

the American shipbuilding industry is not additional shipyards, but additional ships to build. Until this latter requirement shall have been fulfilled or is in a fair way of fulfillment, the discussion of the question of sites or locations for new shipyards will be at least premature." The fact of the matter seems to have been that Mr. Carnegie, with the usual characteristic of the canny Scot, tempered with a moiety of Yankee shrewdness to which may have been added a little piece of bumcombe, threw out a gilded hook for capitalists to chew at, if not to swallow, baited with his steel. Mr. Cramp talks steady and he is right.

THE sum of \$1,025,000 has just been appropriated by Congress for the building of eight revenue cutters. It is well known that this class of departmental tonnage is always expensive work for the shipbuilder and most difficult to figure up to its ultimate cost. The amount appropriated is, in our opinion, just about the sum that should have been mentioned for a fleet of five of these vessels, instead of eight, and, as the contract is sure to be divided, it would be ridiculous for shipbuilders to contest too spiritedly for the distinction of building one or more of these revenue cutters. Where a shipbuilding firm could secure the order for several of the boats it might be a consideration, but for one or even two cutters to be built at the same yard, the sum offered seems to be inadequate to meet the actual outlay incurred for labor, workmanship and material, not to mention the provoking detention and other marked expensive inconveniences always attendant upon the construction of government departmental tonnage. It would appear to have been much the better way, if, in granting the appropriation, Congress had not named the number of cutters, thus leaving a certain discretionary power in the hands of the Revenue Cutter Service in receiving proposals to build a first class fleet.

As the statistical bureau of the Treasury Department has sort of fallen down on lake statistics, the figures embodied each year in the report of the Commissioner of Navigation have been held up, kept standing so to speak, as infallible, peradventure beyond a misconception of their accuracy-no guessing regarding such estimates. Oh no, we wouldn't do it, at the same time there seems to be a jumble up in naming or classifying schooners and barges, nor is it known whether barges under canvas are to be called schooners, or schooners under tow are to be classed as barges and therefore come under the category of steam moving craft. Perhaps the names tow-barge and schooner-rigged tow-barge might give a statistical distinction, but yet, on second thought, everything showing canvas is fore-and-aft rigged, so that makes them all schooner-rigged. The fleet of the American Steel Barge Co. are certainly all tow-barges and steamers.

SHIPOWNERS, individually or as a body, can't enter a protest against Uncle Sam "shanghaeing" machinists and sailors for service under the stars and stripes, but, with a half decent war excitement, or scare, it is easy to see how the lake marine and transportation circles generally, might be crippled for want of skilled labor, and yet a chamber of commerce navigating committee, or some other thoughtless ornamental delegation, felt slighted a little while ago because naval enlistment offices were not opened at the principal lake ports. Navigating committees, indeed! The shipowner figures such outbreaks as the most ignorant and worst kind of commercial piloting-chin music and desk piloting.

## THE MARINE INSURANCE SITUATION.

I have just received the following characteristic utterance from one of the best known men on the lakes. Whether he expected I would use it, or print it without his signature, I don't know, but it is a "skit" too good for the waste paper basket.

"As to the condition of the marine insurance outlook for the season of 1898, no doubt you will be interested in knowing of a want ad., which a prominent vessel owner has assured me he thought of inserting in your valuable paper, should there not be a change in the insurance situation during the coming week. 'WANTED-Marine insurance on a fine 3,000 ton wooden vessel, built six years ago and kept well painted ever since (all she needed). Insurance rate should be low, as in the present deep channels, well buoyed and lighted, she could meet with no accident and she is in less danger than the large steel vessels. Address offers to A. B., the MARINE RECORD.'

"I am also informed that the vessel owners are about to have a meeting with a view of raising the rates of insurance, so as to induce some of the companies to take their risks. I understand also that some of the younger vessel agents are about to issue a policy somewhat in the form of that used last year. This, however, is frowned on by the older vessel

agents, but the young men intend to persevere, even if they have to call to their aid the Board of Trade clerks who give such fine balls to make up the necessary syndicate. It is thought that by paying losses on the installment plan, such a scheme as this might work. In the meantime, the large insurance companies are doing a profitable business waiting for insurance rates to rise. In fact, it is rumored they can make more money by waiting than by insuring."

### NEW CONTRACT FOR A 6,000 TON STEAMER.

As we go to press it is learned that the plans and specifications for another 400-foot, 6,000-ton steel steamer have been approved and the contract let to a well known firm of shipbuilders. We are not at liberty to publish full particulars in the current issue of the RECORD, but will do so next week.

### CHANGES IN THE LIFE-SAVING SERVICE.

The following changes have been ordered in the life-saving stations of the tenth district, Jerome G. Kiah, superintendent: Capt. Geo. W. Plough transferred from Sand Beach to the new station above Port Huron, called Lake View Beach; Capt. Henry Ferris from Pt. Aux Barques to Sand Beach; Capt. Frahm from Deer Park to Pt. Aux Barques; surfman McGaw, of Crisp station, to be promoted to captain and have charge of Muskallonge, Deer Lake Park station. All are able men, and have done good work in the service.

### PRIZES FOR EFFICIENCY IN LAKE NAVIGATION.

One of the most novel contests for educational prizes ever held on the lakes will be a feature of the closing for the year lines will promulgate a tariff of 17 cents on sixth-class and

of the Chicago nautical school next Saturday one week from the opening of navigation.

Gray-bearded skippers who began their apprenticeship on the lakes when the Indian had hardly ceased to paddle his canoe along the shores, will contest for first honors in navigation with young fellows who can but join two ends of a rope together. The school is in charge of Lieut. W. J. Wilson, nautical expert in the hydrographic office, and has gained a wide reputation, sailors from many points on the Great Lakes being taught to solve the problems that have arisen with the abandoning of the old-style wooden ships. With the introduction of steel vessels has come apparently bewildering action on the part of compasses, owing to the magnetic influence of the great hulls. The control of

fresh-water have become students of navigation with the the steamer lines will be off again. younger generation.

captains and mates who manifest the most complete knowledge on the subject of navigation, will be paid in cash and will amount to \$250. The examinations will be under the supervision of marine underwriter George L. McCurdy and Capt. F. D. Herriman, surveyor-general of the Great Lakes Register, Chicago.

## LAKE FREIGHTS

With the placing of large charters for ore from the head of the lakes at 60 and 65 cents, the former figures also given for Marquette charters to Lake Erie ports, as well as a large amount from Duluth-Two Harbors, ore chartering has seemed to ease off. Nor will the 60 cent rate be grasped at very eagerly by the smaller or medium sized tonnage, for the sole reason that it is not a paying rate of freight, and so there is a lull this week in charters for iron ore.

On Monday the steamer Rockefeller and barge 137 were towed to Two Harbors from West Superior to load ore. The Iron Range railway has begun the delivery of ore from the Chandler mine. This ore is to be transferred from the cars directly to the vessels. The Constitution, Manda and Victory will also proceed to Two Harbors for ore cargoes toward the close of the present week.

Coal charters have been the order of the day, each day

this week, and the ruling rate has been 25 cents to Duluth and 30 cents to Lake Michigan, but as a fact almost any old rate would be quoted or taken by those having ore charters, grain to move, or wishing to participate in same on single charters on the early opening of navigation, to smaller ports in small or low classed craft, such as Lorain to Sand Beach 40 cents has been taken, and similar rates to small, shoal water side ports to which only vessels seeking cargo all the time can be chartered.

Grain rates from Chicago and Duluth are dull, upwards of twelve million bushels are now afloat in Chicago, and the last charter, corn to Buffalo from Lake Michigan is quoted at 11/4 cents, with a likelihood that the 1 cent rate will soon prevail. Several large carriers will change ports on Lake Michigan to load ore instead of seeking grain charters.

### LAKE LINE MANAGERS MEET.

The managers of the lake lines seem to be playing into the hands of the railroads. The representatives of the regular line boats from Chicago, Gladstone, and Lake Superior held a meeting at the former named port on Saturday and agreed not to cut rates, as they did last year, but firmly to adhere to agreed tariff rates throughout the season. If the all-rail lines between Chicago and the Atlantic seaboard come to an agreement at their meeting in New York to maintain rates, as it is said they did on Tuesday, on grain and grain products at 20 cents between Chicago and New York the steamer

C. & B. LINE'S NEW STEAMER "CITY OF ERIE," ON THE WAYS, FEBRUARY 26.

This steel side-wheel steamer will be placed on the route this summer between Cleveland and Buffalo. She will maintain a speed of about twenty miles per hour, and a glance at the lines of her hull shows that there is nothing to stop her Fletcher walkingbeam engine from jutting her through at that gait. The highest point of shipbuilding is arrived at when the hull is given a clean entrance and an easy run. This the "City of Erie" has in a marked degree.

the compass and other scientific instruments has consequently 20 cents on fifth-class. Of course, if the railroad lines fail become such a complicated matter that the oldest pilots on to restore rates and maintain them the agreement made by

The prizes, which will be offered as an incentive to the start their boats out before April 15. But on account of advices that the Straits of Mackinaw are now open it is not likely that under the circumstances vessels with grain on board will remain in port three weeks later. Many of them will no doubt start out as soon as they can, agreement or no agreement.

## APPOINTMENT OF OFFICERS.

Chesbrough Bros., Bay City: Steamer-Peshtigo, master, Chas. Haight; engineer, Joseph Buebler.

John Corrigan, Cleveland. Steamer-Aurora, master, John Donaldson; engineer, James Cummings. Schooner-Aurania, master, F. B. Cody.

H. W. McCormick, Bay City: Steamer-Katahdin, master, Michael Canartney; engineer, Robt. Spears. Schooner -Oneonta, master, Patrick Gordon.

The Niagara Navigation Co., Toronto: Steamers-Chippewa, master, J. McGiffin. Corona, master, W. H. Solmes. Chicora, master, R. Clapp. Ongiara, master, R. McIvtyre.

James Corrigan, Cleveland. Steamers-Bulgaria, master, A. H. Gaines; engineer, G. M. Newton. Caledonia, master, J. W. Byron. Italia, master, R. J. Pringle. Schooners-Amazon, master, Harvey Peters. Australia, master, C. H. Marsden. Polynesia, master, Chas. Bush. Northwest, master, C. F. Perew.

Mr. O. W. Blodgett, Bay City, Mich.: Steamer-C. H. Bradley, master, James Bennett; engineer, George M. Hopkins. Schooners-Mary Woolson, master, Wallace Allen. Brightie, master, F. H.Lennon. Peshtigo, master, L. D. Bennett; Goshawk, master, M. Nagle. B. W. Jenness, master, Thomas Turner.

The chief steward of the Goodrich Line, Mr. H. J. Mc-Carthy, has made the following appointments of stewards for the current season: Steamers-Georgia, steward, W. J. Reardon. City of Racine, steward, G. Watson. Indiana, steward, E. Hobard. Iowa, steward, H. Coston. Atlanta, steward, C. McKaig. Sheboygan, steward, T. Healy. Chicago, steward, A. Beaubian.

Anchor Line, Buffalo: Steamers-India, master, P. O'Neil; engineer, D. Donohue. China, master, Charles Christy; engineer, John Wise. Japan, master, John Doherty; engineer, William Wilson. Campbell, master, M. Rowan; engineer, George Stears. Alaska, master, E. Martin; engineer, George W. Towne. Wissahickon, master, J. Mc-Carthy; engineer, Fred Rehbaum. Delaware, master, J. H. McAvoy; engineer, Albert Edgar. Juniata, master, George Delaney; engineer, J. H. Forrester. Conestoga, master, H. Cronkhite; engineer, William Nolan. Lycoming, master, L. Wright; engineer, G. F. Foggett. Conemaugh, master, F. Bloom; engineer, W. A. Black. Lehigh, master, J. H. Berow; engineer, Timothy Griffin. Clarion, master, Charles Nelson; engineer, James Erskine. Susquehanna, master, A. McKenzie; engineer, George McLeod. Codorus, master, D. Ryder; engineer, W. J. Swain. Schuylkill, master, H. O. Miller; engineer, J. E. Jordan. Mahoning, master, J. Corcoran; engineer, C. J. Fox.

J. W. Moore, Cleveland: Steamers-J. W. Moore, master, Richard Neville; engineer, William Nicholas. Louisiana, master, Truman Moore; engineer, George Oldman. Colonial,

master, R. J. Neville; engineer, George Maston. Marquette, master, Ed. Chilson; engineer, Edward Burrows. Siberia, master, Clint Ennis, engineer, Frank Bassett.

Messrs. Parker & Millen, Detroit: Passenger steamers -City of Toledo, engineer, Daniel Harkins. Greyhound, engineer, Robert Meddher. Wreckers, Favorite, master, P. L. Millen; engineer, Geo. L. Simmons. Saginaw, master, Isaac Watt. Tugs-Balize master, P. J. Canniff; engineer, Walter Harling. Onaping, master, J. E.

Tobin; engineer, George Whitehead. James W. Millen, Manager, Detroit: Steamers-

Iron King; master, Wm. F. Millen, engineer, John Hegemer, Iron Chief, master W. A. Irvine; engineer, August Cobo. Iron Duke, master, N. L. Miner; engineer, Chris. Howard. Iron Age, master, John Mc-Alpine; engineer W. G. Beckbissinger. Schooners-Iron Queen, master, Gus. E. Atkinson. Iron Cliff, master, Martin Kurth. Iron State, master, W. W. Carter. Iron City, master, John Hurley.

A. A. Parker, manager, Detroit. Steamers-A. A. Parker master, J. T. Hutton; engineer, P. H. Canton. John Oades, master, Timese Demay; engineer, Harry Merrill. John Pridgeon, Jr., master, D. N. Sherwood; engineer, John The managers of the lake liners have also agreed not to Mogan. B. W. Blanchard, master, Thos. Meikleham; engineer, John Bloom. Schooners-B. W. Parker, master, Edward Lohr. Red Wing, master, Charles Anderson. San Diego, master, John Mason. Saveland, master, Henry Morley.

The Wilson Transit Co., Cleveland: Steamers-Andrew Carnegie, master, W. W. Dawley; engineer, Fred M. Harmon. W. D. Rees, master, C. A. Benham; engineer, Fred C. Stoeber. Yuma, master, Daniel Buie; engineer, John Skelley. Spokane, master, C. C. Tousley; engineer, James Derrig. Olympia, master, A. M. Shepherd; engineer, W. F. Gregory. Yakima, master, W. A. Williams; engineer, Jas. McQuirk. Sitka, master, Geo. W. Bryce; engineer, John Walsh. Wallula, master, Alex Forbes; engineer, Henry W. Burton. C. Tower, master, Geo. Brock; engineer, Peter Lamar. Schooner-Yukon, master, William Forbes. New schooner now building, master, James Higgins.

J. S. Dunham, Chicago: Steamers-City of London, master, William Anderson; engineer, J. J. Staley. W. P. Ketcham, master, W. J. Carter; engineer, Anthony J. Smith. Schooner-George B. Owen, master, H. R. Moore.

The Niagara Navigation Co., Toronto, Ont.: Steamers-Chippewa, master, I. McGiffin; engineer, R. McCaul. Corona, master, W. H. Solmes; engineer, J. Waish. Chicora, master, R. Clapp; engineer, H. Parker. Ongiara, master, H. McIntyre.

The Northwest Transportation Co., Sarnia, Ont.: Monarch, master, E. Robertson; engineer, E. W. McKeane; purser, Jas. H. Ronan; steward, Geo. E. Morrison. United Empire, master, J. McNab; engineer, Sam Brisbin; purser, W. A. Young; steward, T. R. Ingles.

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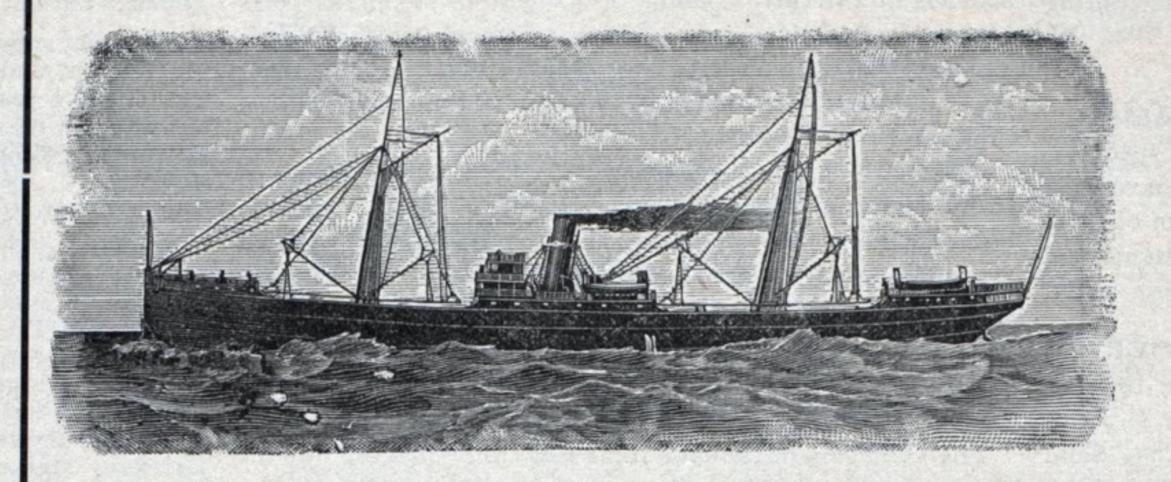
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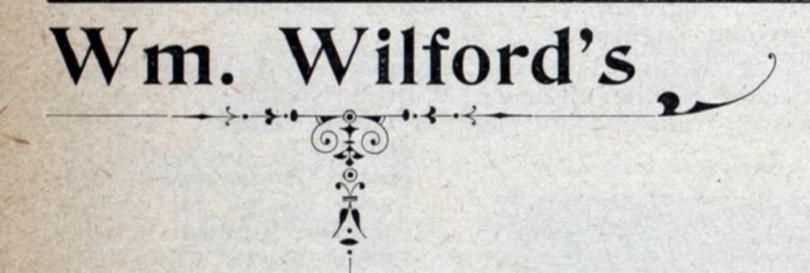
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## TREASURY DECISIONS RELATING TO MARINE INTERESTS.

LICENSING OF VESSELS AS YACHTS.

Vessels are not to be licensed as yachts while employed for business purposes.

SIR: This Department is in receipt of your letter, dated the 23d ultimo, relative to the yacht Buccaneer, which you state, as representative of the owner, Mr. W. R. Hearst, of New York, is to be used between Habana and Key West to convey the correspondents of the New York Journal, as well as dispatches from those correspondents, to and from Habana and Key West.

You state that Mr. Hearst desires to know whether such use of the Buccaneer would or would not be "in violation of

her yachting license and privilege."

The steamer is licensed under section 4214 of the Revised Statutes, as amended. This section authorizes the Secretary of the Treasury to cause yachts "used and employed exclusively as pleasure vessels," or designed as models of naval architecture, if owned by a citizen of the United States, to be licensed on terms which will authorize them to proceed from port to port of the United States and by sea to foreign ports, but provides that such vessels "so enrolled and licensed shall not be allowed to transport merchandise or carry passengers for pay." The law also provides that no licensed yacht shall engage in any trade nor in any way violate the revenue laws of the United States, and "that every such yacht shall comply with the law in all respects."

The Solicitor of the Treasury, under date of the 2d instant, states that he is satisfied "the yacht in question is not engaged in any trade nor in any way has violated the revenue laws of the United States, and is not engaged in the business of transporting merchandise or carrying passengers for pay." He expresses the opinion, however, that while the vessel is engaged in conveying correspondents of New York Journal and dispatches for that paper to and from Habana and Key West, as aforesaid, she is evidently not employed exclusively as a pleasure vessel and is not entitled to the privileges of a vessel licensed as a yacht under the laws of the United States.

This Department adopts the opinion of the Solicitor, and advises you that the Buccaneer can not legally be employed in the business mentioned while licensed as a yacht under the statute above cited. Your attention is invited to the penalty imposed by section 5 of the act of January 16, 1895, relating to yachts.

Respectfully, yours,

O. L. SPAULDING, Assistant Secretary. H. J. Brown, Esq., Washington, D. C.

. J. DROWN, 125Q., Washington, D. C.

TREASURY DEPARTMENT, CHIEFS OF DIVISIONS.

The following is the assignment of business to the Assistant Secretaries:

Hon. OLIVER L. SPAULDING, Assistant Secretary.—To vessel subject to the navigation laws of the United States,

Assistant Secretary Spaulding is assigned the general direction and supervision of all matters relating to the public business assigned to the following bureaus, offices, and division: The Bureau of Immigration; the Office of the Coast and Geodetic Survey; the Bureau of Navigation; the Office of the Life-Saving Service; the Office of the Supervising Inspector-General Steamboat-Inspection Service; the Office of the Light-House Board; the Office of the Supervising Surgeon-General Marine-Hospital Service; the Office of the Supervising Architect; the Miscellaneous Division, and the Office of the Chief Clerk and Superintendent.

Hon. WILLIAM B. HOWELL, Assistant Secretary. — To Assistant Secretary Howell is assigned the general direction and supervision of all matters pertaining to the Customs Service, and all matters relating to the public business assigned to the following bureau and divisions: The Bureau of Statistics; the Division of Customs; the Division of Revenue-Cutter Service; the Division of Special Agents and the Division of Stationery, Printing, and Blanks.

L. J. GAGE, Secretary.

- PILOTS.

United States licensed pilots not required on steamers sailing under register.

TREASURY DEPARTMENT, February 25, 1898.

SIR: This Department is in receipt of your letter of the 14th instant, calling attention to what you deem an irregularity on the part of owners and masters of American steamers navigating the inland waters of Alaska, citing in support of your statement the case of the steamers Albion and National City, which sailed recently "for Dyea, Alaska, via Victoria, B. C.," which steamers, you say, have engaged English pilots at Victoria to take them through the inland waters of Alaska, and then to continue their employment to Lynn canal, 240 miles through American waters, which you say you are informed is illegal.

In reply, you are informed that if the steamers named by you cleared for Dyea via Victoria, B. C., they evidently sailed under register, and therefore would not be required to carry United States licensed pilots while en route, either while in the United States or in foreign waters, steamers sailing under register being exempt from carrying licensed pilots under the provisions of section 4401, Revised Statutes of the United States, which is quoted for your information, as follows:

SEC. 4401. All coastwise sea-going vessels, and vessels navigating the Great Lakes, shall be subject to the navigation laws of the United States, when navigating within the jurisdiction thereof; and all vessels, propelled in whole or in part by steam, and navigating as aforesaid, shall be subject to all the rules and regulations established in pursuance of law for the government of steam-vessels in passing, as provided by this Title, and every coastwise sea-going steam-vessel subject to the navigation laws of the United States

Assistant Secretary Spaulding is assigned the general direction and supervision of all matters relating to the public business assigned to the following bureaus, offices, and division: The Bureau of Immigration; the Office of the Coast and

Respectfully, yours,
L. J. GAGE, Secretary.
A. J. SMITH, Esq., San Francisco, Cal.

BUILDING UP THE MERCHANT MARINE.

(THE AGE OF STEEL.)

The growth of the export trade of the United States, and the small percentage of it carried in American bottoms, has aroused considerable interest both as to causes and remedies. There is a wide margin for differences of opinion as to both, but there is none as to the need of a strong effort being made to place the American merchant marine on a footing commensurate with the commercial importance of the country it would represent. So far, American enterprise, energy and capital, have been largely placed in the building up of home industries, in the developing of native resources, and in perfecting a system of railways that in the course of a few decades, has practically grid-ironed half a hemisphere, and carried millions of home-seekers to nearly every habitable point between two oceans. All this represents an enormous expenditure of money, labor and enterprise. As one of the sequences, we have established industries, increased capacity of production, and have reached the point where we have a fair fighting chance with the rest of the world in competing for outside trade. It is not to be supposed that the rest of the world will have nothing to say in the matter of seacarriage. In the interchange of commodities, there are equal rights in the freightage of the same, and no special plea, and no artificial measures, can so change the laws of trade as to make the free seas the supreme monopoly of any one nation. It is true that in such a case as that of Great Britain a socalled sea-supremacy may be due to the sea-going instincts of the people; to Viking hardihood and daring, and to a genius for colonization that so far has no modern parallel, but even this supremacy, the result of centuries of struggle, is but temporary and is sooner or later to make way for younger and equally enterprising rivals. The causes that have been operative in one case will be active in the rest, with the same conditions as to expansion or limitations. There can never be any permanent monopoly of the seas. Supremacy is constantly changing hands and has been from the ships of Carthage to the galleons of Spain, and all along

the line from the stout old brigs of Plymouth to the grey- Alex. McDougall; secretary, Eugene J. Henry; general pashounds of the Atlantic. As international trade increases, the pressure of ocean trade is a dominant factor, and the country with a seafront that has the most to sell has the most vital interest in its merchant marine. In the internal waterways pared for two additional boats to be used in the night serand lakes of the United States we have a fleet of vessels that vice, each carrying cargo and passengers and touching at is stupendous, and it has grown out of purely commercial necessities, and for the same reason our deep sea trade is evidently destined to be correspondingly large. As it is we spend some \$300,000,000 a year on our foreign carrying trade, nations. As indicating the increase in tonnage of American imports and exports of merchandise, the following table is significant:

	TOI	NNAGE.			
VESSELS.	December.		Twelve Months ending December		
	1896	1897	1896	1897	
Entered, Sail Steam Cleared, Sail Steam	Tons 314,809 1,576,711 356,329 1,635,934	Tons 328,887 1,626,931 359,685 1,844,094	17,756,032 4,686,162	Tons 4,810,290 19,596,386 4,813,998 19,702,038	

It goes with the telling that the new merchant marine of the United States has a bright future if not neglected, and that for some decades to come, its shipbuilding industries will be prominent factors in our national life.

### THE WHALEBACK PASSENGER STEAMER.

The whaleback passenger steamer Christopher Columbus will ply between Chicago and Milwaukee next summer, as she has done every season since 1893. A new company to manage the business of the whaleback and other vessels was organized at a meeting held at Chicago, March 9. This the corporation, having a capital of \$1,000,000 is styled Chicago & Milwaukee Transportation Co. Its officers are: President and tressurer, E. W. Herrick; vice president,

senger agent, G. S. Whitslar.

The new company will enter into competition with the Goodrich line for Milwaukee business, and has plans pre-Waukegan and Racine. One of the new boats, it is said, will be a whaleback passenger steamer built on the lines of the Christopher Columbus.

The organization of the new company finally refutes the nearly all of this going to the shipping interests of other rumor that the Christopher Columbus had been purchased by the Goodrich Co. The first excursion of the whaleback this season will be made on June 20. Improvements to the extent of \$25,000 have been made on the boat, and Capt. Robt. Smith will again be master of the craft.

### VISIBLE SUPPLY OF GRAIN

As compiled for The Marine Record, by George F. Stone, Secretary Chicago Board of Trade.

CITIES WHERE STORED.	WHEAT. Bushels.	CORN. Bushels.	OATS. Bushels.	RYE. Bushels.	BARLEY. Bushels.
Buffalo	648,000 7,796,000 109,000 3,020,000 113,000	756,000 17,049.000 17,000 3,084,000 123,000	87,000 1,394,000 18,000 2,836,000 88,000	50,000 913,000 18,000 1,323,000 84,000	249,000 360,000 1,000 383,000 12,000
Montreal	94,000 223 000 27.000	897,000	976,000 310,000 16,000 46,000	13,000	38,000
Grand Total	31,417,000	43,388,000	12,304,000	3,291,000	1,506,000
Corresponding Date, 1897	40,430,000	26,077,000	13,797,000	3,648,000	3,068,000
Decrease	998,000		550,000	118,000	150,000

While the stock of grain at lake ports only is here given, the total shows the figures for the entire country except the Pacific Slope.

KING OSCAR, of Sweden, has conditionally accepted the offer made through the United States government by Walter

Wellman, to carry, free of charge, upon his polar expedition steamer Laura, which is to sail from Tromso, Norway, June 20, a party of Swedes to search for their countryman, Prof. Andree, in Franz Josef Land.

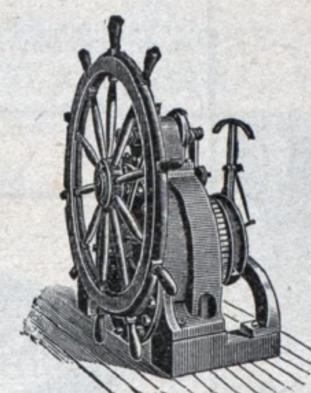
THE Journal of the American Society of Naval Engineers for February contains the gold prize essay by W. W. White, entitled "Steam Consumption of the Main and Auxiliary Machinery of the United States Triple-screw Steamer Minneapolis;" also articles upon "Water Tube Boilers," by Darwin Almy, of Providence, R. I.; "Trials of the Niclausse Water Tube Boiler," by Jay M. Whitman; "The Deisel Motor," by E. D. Meir; "Speed and Power Trials of a Light-Draft Steam Launch," by Charles Ward, of Charleston, W. Va., etc.

### PROPOSALS.

U. S. ENGINEER OFFICE, Duluth, Minn., March 10, 1898. Sealed proposals for building Concrete Footing Blocks for superstructure for south pier, Duluth ship canal, will be received here until noon, April 11, 1898, and then publicly opened. Information furnished on application. Clinton B. Sears, Major, Engrs. 11-14

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THE BEST AND MOST & POWERFUL STEERER FOR & TUGS, STEAMERS, ETC. &

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Write for Prices and References.

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Tensile strength of plates one-quarter inch thick, upward of 78,000 lbs. per square inch. Torsional strength equal to the best machinery steel. Non-corrosive in sea water. Can be forged at cherry red heat. Round, Square and Hexagon Bars for Bolt Forgings, Pump Piston Rods, Yacht Shaftings, etc. Rolled Sheets and Plates for Pump Linings and Condenser Tube Sheets, Centerboards, Fin Keels and Rudders.

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EUGENE L. ELLISON, Vice President. GREVILLE E. FRYER, Sec'y and Treas. JOHN H. ATWOOD, Assistant Secretary.

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The profits of the Company revert to the assured, and are divided annually upon the premiums terminated during the year; thereby reducing the cost of insurance. For such dividends, certifir cates are issued bearing interest untill ordered to be redeemed, in accordance with the charter.

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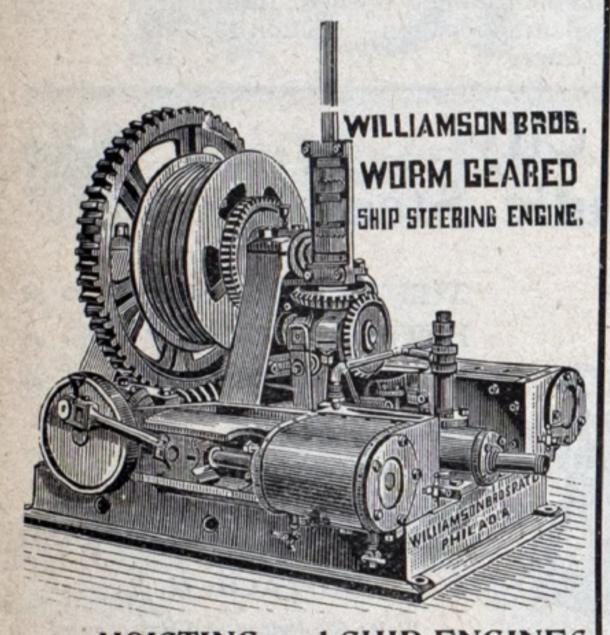
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Heavy Castings a Specialty. Prices Quoted on Application. Fore and Aft Compound Marine Engines.

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Steamer Glenn, South Haven, 14 and 28x20
U. S. Survey Steamer, W. S. Hancock 12and 21x20
Steamer Pine Lake, Charlevoix, 16 and 30x24.
Passenger Steamer Pilgrim, St. Clair, 14and 28x20
Steam Barge Iona, Grand Haven, 24 and 46x42.
Steam Barge M. T. Greene, Chicago, 20 and 36x36
Steamer H. W. Williams, South Haven, 18 and 36x30
Steam Barge Mark B. Covell, Manistee, 18 and 30x26
Steam Barge Isabella J. Boyce, Michigan City, 19 and 32x26. 19 and 32x26. Steam Barge Luella H. Worthington, Cedar

River, 19 and 36x30. Passenger Steamer City of Kalamazoo, South

Haven, 20 and 40x30. Steamer Oval Agitator, Chicago, 14 and 28x20.

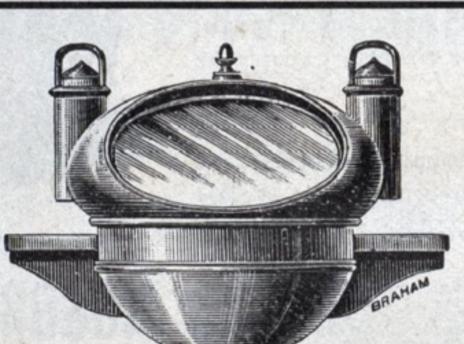
Tug E. G. Crosby, Muskegon, 16 and 30x24.

Tug Peter Coates, Sault Ste. Marie, 10 and 20x16. Steamer Lorain L, South Haven, 12 and 21x16. Passenger Steamer Lotus, Escanaba, 16 and 30x24 Steam Barge Sachem, Grand Haven, 21 and 38x36 Passenger Steamer Bon Ami, Saugatuck, 14 and

Steam Barge Charles A. Street, Chicago, 20 and

Steam Barge Edward Buckley, Manistee, 18 and 36x30.
Passenger Steamer E. G. Maxwell, Pentwater, 14 and 28x20. Passenger and Freight Steamer Bon Voyage, Saugatuck, 16 and 30x26.
Passenger and Freight Steamer Mabel Bradshaw, Muskegon, 26 and 28x26. The engraving represents our 20 and 36x36 Fore and Aft Compound Marine Engine. We build them all sizes and guarantee them to give satisfaction. Prices furnished on application.

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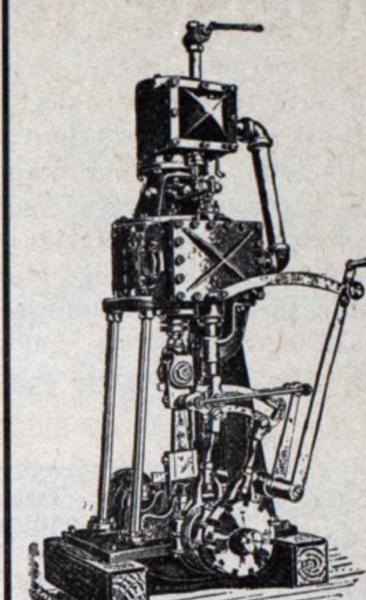
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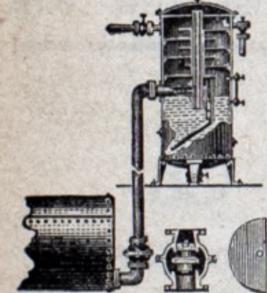
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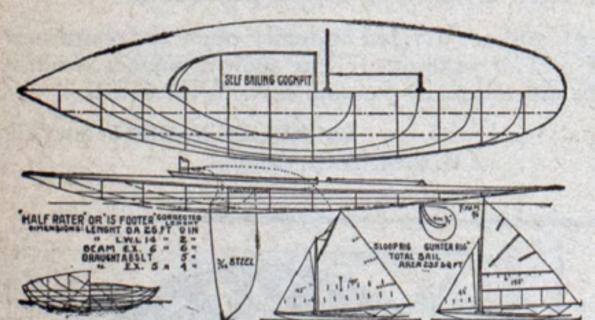
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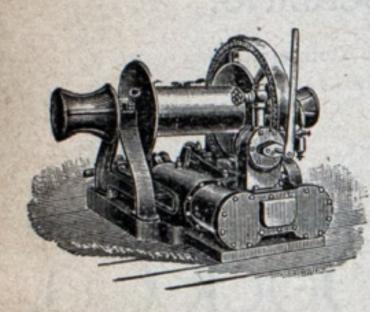
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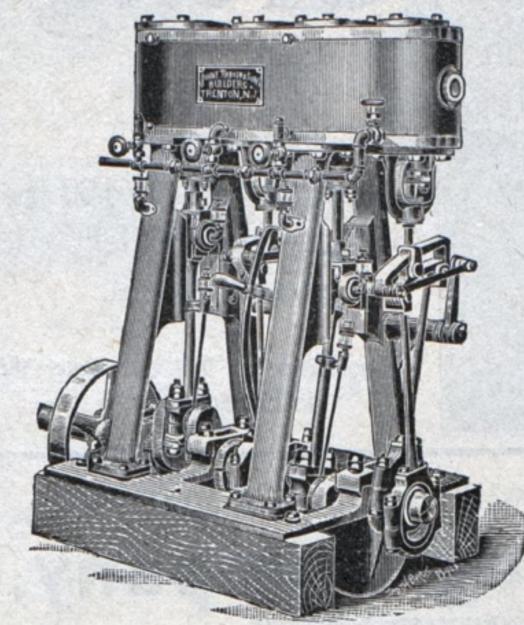
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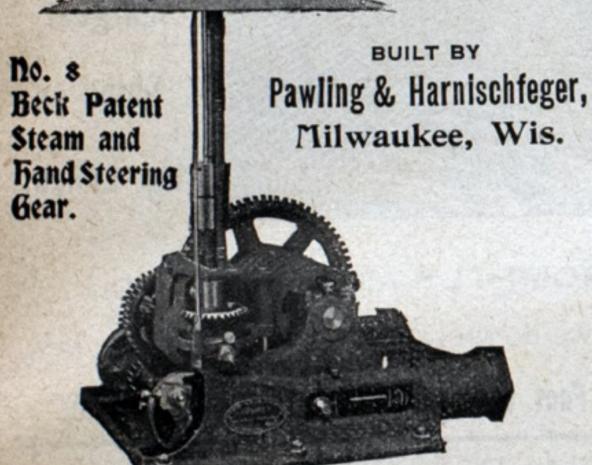
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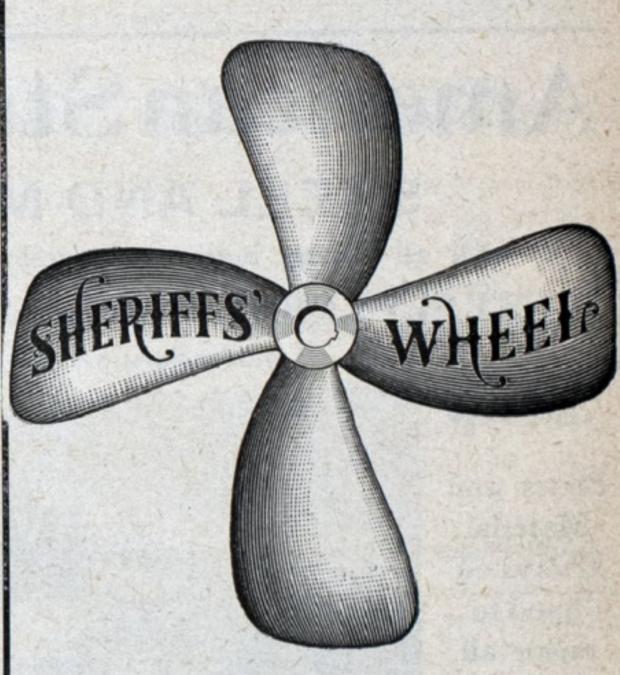
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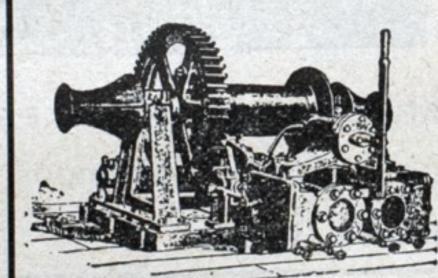
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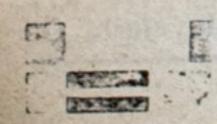
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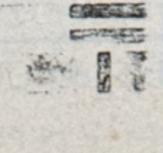
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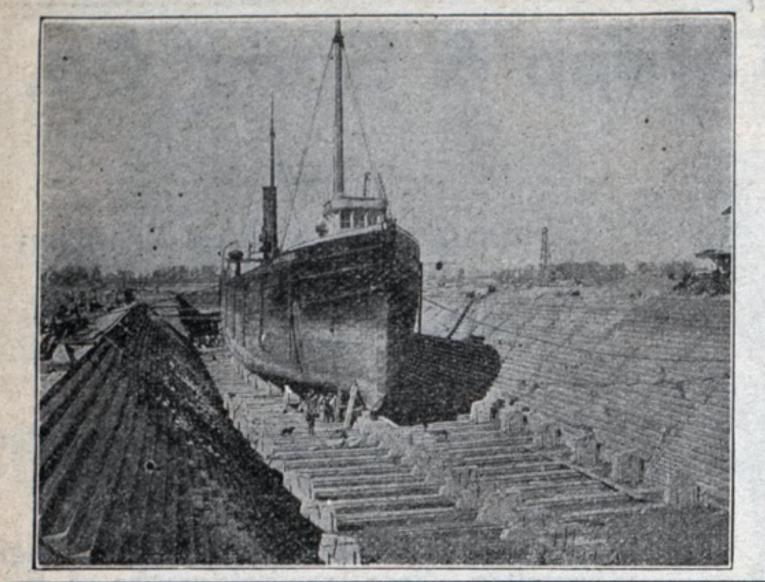
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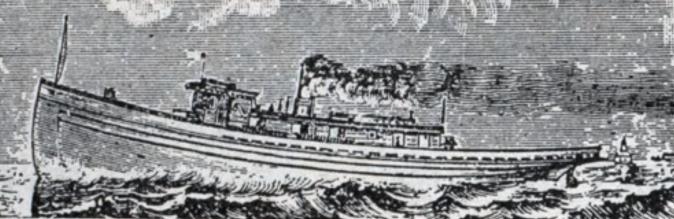
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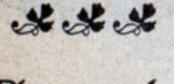
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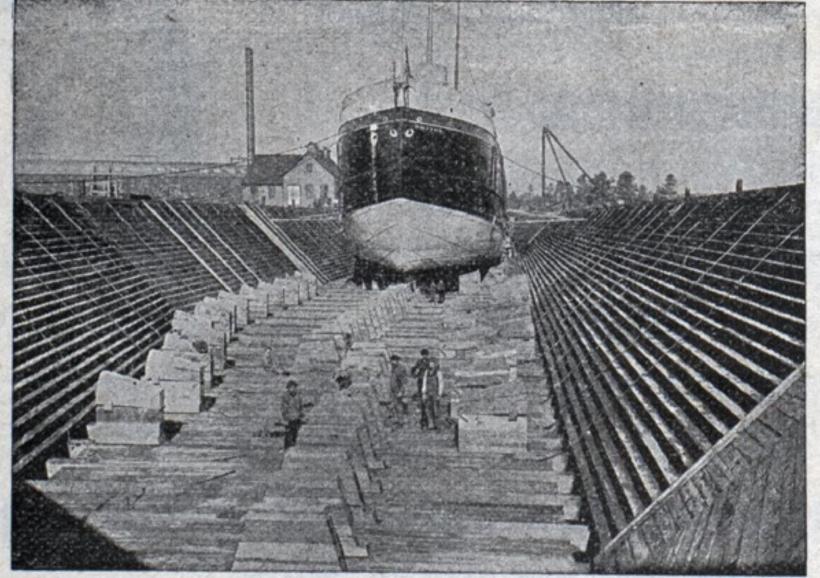
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